

Area Wage Survey

Dayton, Ohio,
Metropolitan Area
December 1980

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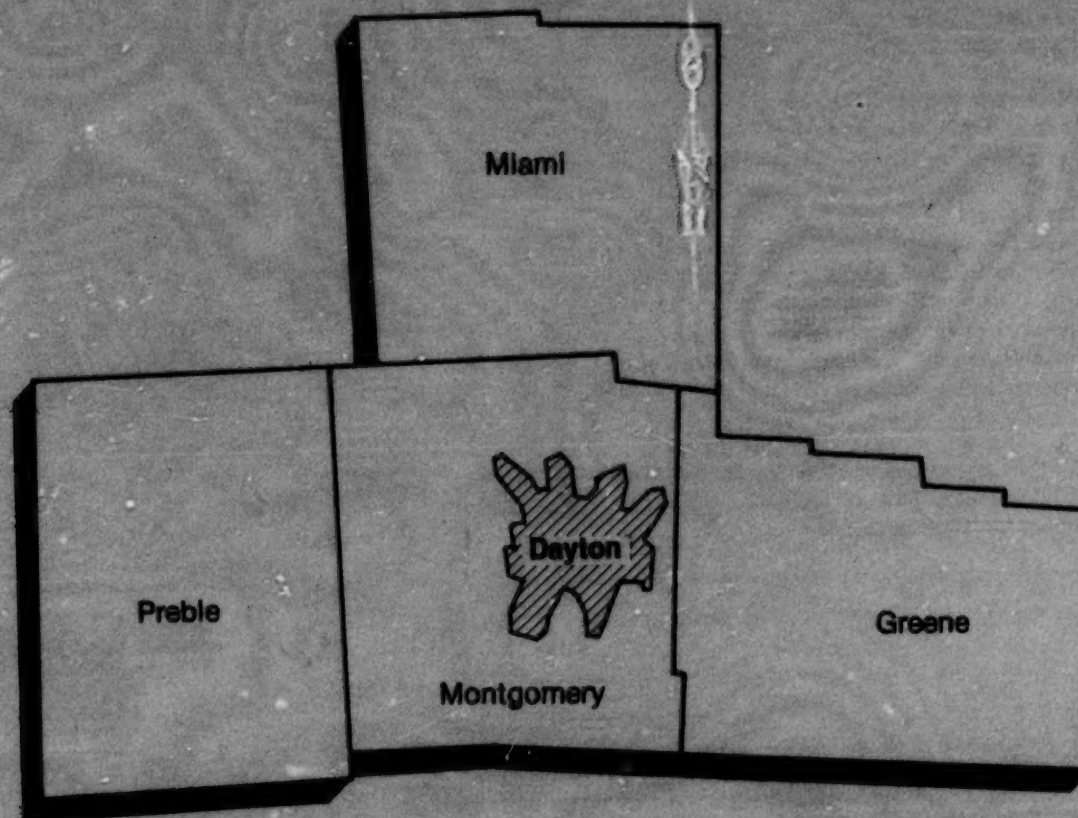
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Bureau of Labor Statistics

Bulletin 3010-65



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Preface

This bulletin provides results of a December 1981 survey of occupational earnings in the Dayton, Ohio, Standard Metropolitan Statistical Area. The survey was made as part of the Bureau of Labor Statistics' annual area wage survey program. It was conducted by the Bureau's regional office in Chicago, Ill., under the general direction of Lois L. Orr, Assistant Regional Commissioner for Operations. The survey could not have been accomplished without the cooperation of the many firms whose wage and salary data provided the basis for the statistical information in this bulletin. The Bureau wishes to express sincere appreciation for the cooperation received.

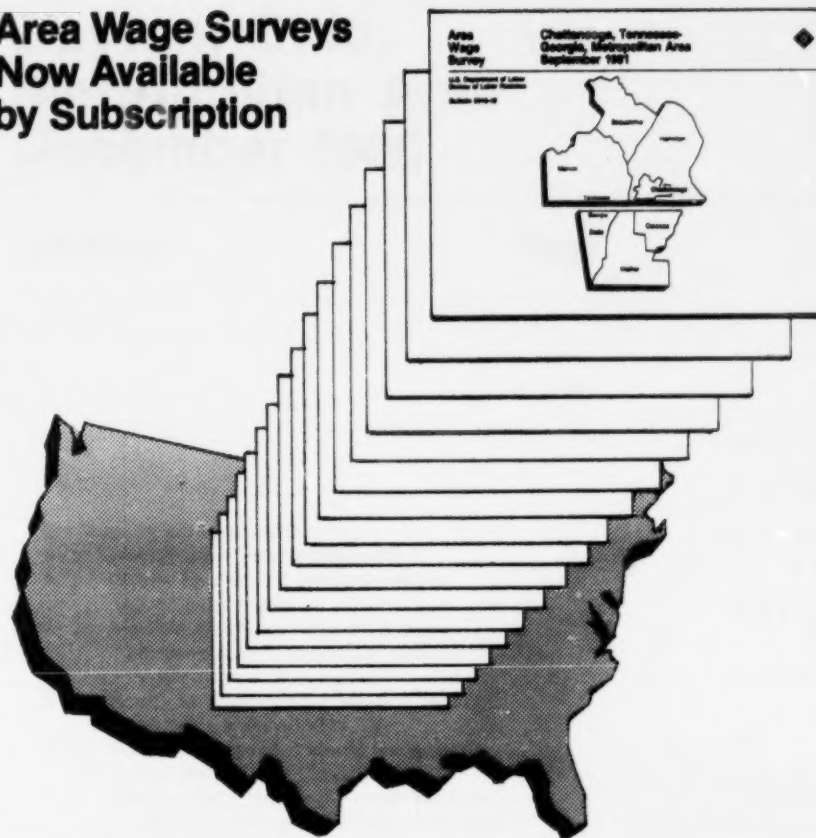
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Area Wage Survey

Dayton, Ohio, Metropolitan Area December 1980



U.S. Department of Labor
Raymond J. Donovan, Secretary

Bureau of Labor Statistics
Janet L. Norwood,
Commissioner

February 1982

Bulletin 3010-65

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Introduction

This area is 1 of 71 in which the U.S. Department of Labor's Bureau of Labor Statistics conducts surveys of occupational earnings and related benefits. (See list of areas on inside back cover.) In each area, earnings data for selected occupations (A-series tables) are collected annually. Information on establishment practices and supplementary wage benefits (B-series tables) is obtained every third year. This report has no B-series tables.

Each year after all individual area wage surveys have been completed, two summary reports are issued. The first brings together data for each metropolitan area surveyed; the second presents national and regional estimates, projected from individual metropolitan area data, for all Standard Metropolitan Statistical Areas in the United States, excluding Alaska and Hawaii.

A major consideration in the area wage survey program is the need to describe the level and movement of wages in a variety of labor markets, through the analysis of (1) the level and distribution of wages by occupation, and (2) the movement of wages by occupational category and skill level. The program develops information that may be used for many purposes, including wage and salary administration, collective bargaining, and assistance in determining plant location. Survey results also are used by the U.S. Department of Labor to make wage determinations under the Service Contract Act of 1965.

A-series tables

Tables A-1 through A-6 provide estimates of straight-time weekly or hourly earnings for workers in occupations common to a variety of manufacturing and nonmanufacturing industries. Where possible, occupations with related duties (e.g. accounting clerks and payroll clerks) are clustered to facilitate comparison. The occupations are defined in appendix B. For the 31 largest survey areas, tables A-12 through A-17 provide similar data for establishments

employing 500 workers or more.

Beginning in 1981, multilevel jobs are designated numerically instead of alphabetically. A job conversion list is provided in appendix C.

Table A-7 provides indexes and percent changes in average hourly earnings for office clerical workers, electronic data processing workers, industrial nurses, skilled maintenance trades workers, and unskilled plant workers. Where possible, data are presented for all industries and for manufacturing and nonmanufacturing separately. Data are not presented for skilled maintenance workers in nonmanufacturing because the number of workers employed in this occupational group in nonmanufacturing is too small to warrant separate presentation. This table provides a measure of wage trends after elimination of changes in average earnings caused by employment shifts among establishments as well as turnover of establishments included in survey samples. For further details, see appendix A.

Tables A-8 through A-11 provide measures of pay relationships in establishments. These measures may differ considerably from the pay relationships of overall area averages published in tables A-1 through A-6. See appendix A for details.

Appendixes

Appendix A describes the methods and concepts used in the area wage survey program and provides information on the scope of the survey.

Appendix B provides job descriptions used by Bureau field representatives to classify workers by occupation.

Appendix C is an alphabetic to numeric conversion list for all multilevel jobs in the survey.

Table A-1. Weekly earnings of office workers in Dayton, Ohio, December 1981

Table A-1. Weekly earnings of office workers			Number of workers receiving straight-time weekly earnings (in dollars) of —																									
Occupation and industry division	Number of workers	Average weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ²			130 and under 140	140-150	150-160	160-170	170-180	180-200	200-220	220-240	240-260	260-280	280-300	300-320	320-340	340-360	360-380	380-420	420-460	460-500	500-540	540-580	580 and over		
			Mean ³	Median ³	Middle range ³																							
Secretaries.....	1,518	39.0	278.50	255.50	217.00- 310.50	-	-	35	8	78	118	164	178	220	178	103	101	73	42	49	33	33	36	34	19	18		
Manufacturing.....	1,045	39.5	302.00	271.00	237.50- 331.50	-	-	-	-	49	113	117	157	141	87	85	57	32	38	32	30	36	34	19	18			
Nonmanufacturing.....	473	38.5	226.00	217.00	179.50- 255.00	-	-	35	6	78	69	51	61	63	37	16	16	10	11	1	1	-	-	-	-	-		
Transportation and utilities.....	103	38.5	235.00	193.00	170.00- 296.50	-	-	-	-	32	20	8	8	6	-	4	1	5	7	10	-	-	-	-	-	-		
Secretaries I.....	104	38.5	205.50	198.50	155.00- 243.00	-	-	34	-	-	24	11	8	15	5	1	6	-	-	-	-	-	-	-	-	-		
Manufacturing.....	66	39.0	232.50	231.00	196.50- 253.00	-	-	-	-	-	20	11	8	15	5	1	6	-	-	-	-	-	-	-	-	-		
Secretaries II.....	454	39.0	225.50	216.00	190.00- 250.50	-	-	-	6	70	67	96	58	69	35	26	5	4	7	10	1	-	-	-	-	-		
Manufacturing.....	253	39.0	236.00	232.50	210.50- 256.50	-	-	-	-	21	77	44	59	28	20	4	-	-	-	-	-	-	-	-	-	-		
Nonmanufacturing.....	201	39.0	212.50	186.50	170.00- 220.00	-	-	-	6	70	46	19	14	10	7	6	1	4	7	10	1	-	-	-	-	-		
Transportation and utilities.....	79	38.5	236.00	187.00	170.00- 322.00	-	-	-	-	32	16	-	2	4	-	2	1	4	7	10	1	-	-	-	-	-		
Secretaries III.....	552	39.5	293.50	264.50	230.00- 329.00	-	-	1	-	8	25	50	88	85	66	40	35	34	9	18	19	26	27	21	-	-		
Manufacturing.....	421	39.5	312.50	280.50	248.00- 368.00	-	-	-	-	8	22	51	69	58	38	32	24	9	18	19	25	27	21	-	-	-		
Nonmanufacturing.....	131	39.0	232.00	226.50	200.50- 241.50	-	-	1	-	8	17	28	37	16	8	2	3	10	-	-	-	-	-	-	-	-		
Secretaries IV.....	265	39.5	318.00	295.00	256.00- 338.00	-	-	-	-	-	1	7	22	40	40	29	37	29	10	13	6	3	5	10	13	-		
Manufacturing.....	207	40.0	335.00	310.50	270.50- 357.00	-	-	-	-	-	3	14	13	33	27	30	26	9	13	6	3	5	10	13	-			
Nonmanufacturing.....	58	39.5	257.00	255.00	243.50- 265.50	-	-	-	-	-	1	4	8	27	7	2	7	1	1	-	-	-	-	-	-	-		
Secretaries V.....	131	39.0	379.50	341.00	279.00- 447.50	-	-	-	-	-	-	-	-	4	31	6	16	6	16	8	7	4	4	3	6	* 18		
Manufacturing.....	98	39.5	406.50	356.50	310.00- 519.00	-	-	-	-	-	-	-	-	1	17	1	13	5	14	7	7	2	4	3	6	18		
Nonmanufacturing.....	33	37.5	299.00	275.50	271.00- 306.50	-	-	-	-	-	-	-	-	3	14	5	5	1	2	1	-	2	-	-	-	-		
Stenographers.....	179	39.5	271.00	260.00	198.50- 338.00	-	-	4	25	6	12	16	13	13	7	13	9	33	-	8	12	6	2	-	-	-		
Manufacturing.....	107	40.0	256.00	230.00	171.50- 299.50	-	-	-	25	6	8	11	7	9	5	9	3	-	-	8	8	6	2	-	-	-		
Nonmanufacturing.....	72	38.5	292.50	325.50	240.00- 338.00	-	-	4	-	-	4	5	6	4	2	4	6	33	-	-	4	-	-	-	-	-		
Stenographers I.....	106	39.5	242.50	210.00	168.50- 330.00	-	-	4	25	4	9	15	5	5	2	2	6	25	-	-	-	-	-	-	-	-		
Manufacturing.....	53	40.0	191.00	170.00	167.00- 208.00	-	-	-	25	4	5	10	5	2	-	2	-	-	-	-	-	-	-	-	-	-		
Stenographers II.....	73	39.0	312.00	297.50	252.50- 373.00	-	-	-	-	2	3	1	8	8	5	11	3	8	-	8	8	6	2	-	-	-		
Manufacturing.....	54	40.0	320.00	285.50	257.50- 386.00	-	-	-	-	2	3	1	2	7	5	7	3	-	-	8	8	6	2	-	-	-		
Transcribing-machine typists.....	176	40.0	213.50	199.00	190.00- 231.50	-	-	-	-	30	62	24	37	3	7	2	4	7	-	-	-	-	-	-	-	-		
Manufacturing.....	156	40.0	203.00	194.00	188.00- 225.00	-	-	-	-	30	61	23	37	1	2	2	-	-	-	-	-	-	-	-	-	-		
Typists.....	380	39.5	211.00	187.00	157.50- 225.50	8	48	43	23	37	65	39	36	10	2	4	7	11	39	3	1	3	1	-	-	-		
Manufacturing.....	142	40.0	203.00	187.00	172.50- 211.00	-	5	9	14	22	47	18	12	5	1	1	-	-	-	3	1	3	1	-	-	-		
Nonmanufacturing.....	238	39.5	216.00	185.00	153.00- 277.50	8	43	34	9	15	18	21	24	5	1	3	7	11	39	-	-	-	-	-	-	-		
Transportation and utilities.....	99	40.0	288.00	335.50	222.00- 343.50	-	2	2	-	-	2	8	23	1	1	3	7	11	39	-	-	-	-	-	-	-		
Typists I.....	181	40.0	176.00	164.00	147.50- 183.00	8	44	32	19	23	30	9	1	4	-	-	-	11	-	-	-	-	-	-	-	-		
Typists II.....	199	39.5	243.00	221.00	189.00- 302.00	-	4	11	4	14	35	30	35	6	2	4	7	-	39	3	1	3	1	-	-	-		
Manufacturing.....	76	40.0	223.00	199.00	184.00- 222.50	-	2	2	2	8	25	14	11	2	1	1	3	7	-	39	-	-	-	-	-	-		
Nonmanufacturing.....	123	39.5	255.00	229.50	205.00- 343.50	-	2	9	2	6	10	16	24	4	1	3	7	-	-	-	-	-	-	-	-	-		
File clerks.....	172	39.5	181.00	180.50	154.50- 189.00	14	23	13	21	13	51	23	1	5	1	3	-	4	-	-	-	-	-	-	-	-		
Manufacturing.....	54	40.0	191.00	183.50	165.00- 200.00	-	1	5	12	4	9	16	1	5	1	-	3	-	4	-	-	-	-	-	-	-		
Nonmanufacturing.....	118	39.5	176.50	172.50	144.00- 189.00	14	22	8	9	9	42	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
File clerks I.....	94	39.5	160.50	161.50	141.00- 170.50	14	23	8	21	10	7	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Manufacturing.....	33	40.0	176.50	168.50	161.50- 200.00	-	1	5	12	2	2	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Nonmanufacturing.....	61	39.5	151.50	144.00	140.00- 165.00	14	22	3	9	8	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
File clerks II.....	73	39.5	200.50	189.00	189.00- 204.50	-	-	5	-	3	44	10	1	5	1	3	-	1	-	-	-	-	-	-	-	-		
Messengers.....	96	40.0	182.00	179.00	153.00- 193.50	5	15	11	5	12	28	3	3	11	-	3	-	-	-	-	-	-	-	-	-	-		
Manufacturing.....	59	40.0	184.00	180.00	152.00- 206.50	-	14	5	1	6	17	3	2	11	-	-	3	-	-	-	-	-	-	-	-	-		
Nonmanufacturing.....	37	39.5	178.50	171.00	155.00- 186.00	5	1	6	4	6	11	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-		
Switchboard operators.....	67	39.5	208.00	177.50	150.00- 236.50	1	-	18	1	14	4	8	6	6	-	1	2	4	-	-	-	-	-	-	-	-		
Manufacturing.....	39	39.0	233.00	214.00	177.00- 245.00	-	-	-	-	12	3	7	4	6	-	1	-	4	-	-	-	-	-	-	-	-		
Nonmanufacturing.....	28	39.5	173.00	150.00	150.00- 174.50	1	-	18	1	2	1	1	2	-	-	-	2	-	-	-	-	-	-	-	-	-		

See footnotes at end of tables.

Table A-1. Weekly earnings of office workers in Dayton, Ohio, December 1981—Continued

Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings (in dollars) ²			Number of workers receiving straight-time weekly earnings (in dollars) of —																						
			Mean ³	Median ³	Middle range ³	130 and under 140	140	150	160	170	180	200	220	240	260	280	300	320	340	360	380	400	420	460	500	540	580 and over	
							-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Switchboard operator-receptionists.....	249	39.5	194.50	180.00	165.00—226.00	25	-	20	31	42	43	18	36	24	2	-	2	-	4	-	-	-	1	1	-	-	-	-
Manufacturing.....	129	40.0	198.50	178.00	160.00—232.00	18	-	10	16	29	7	4	20	15	2	-	2	-	4	-	-	-	1	1	-	-	-	-
Nonmanufacturing.....	120	39.5	190.00	190.00	168.00—215.00	7	-	10	15	13	36	14	16	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order clerks.....	125	40.0	203.50	194.50	178.00—213.00	-	2	8	8	16	47	18	8	1	1	13	3	-	-	-	-	-	-	-	-	-	-	-
Manufacturing.....	76	40.0	218.00	194.50	192.50—235.00	-	-	-	-	10	33	12	3	1	1	13	3	-	-	-	-	-	-	-	-	-	-	-
Order clerks I.....	94	40.0	188.50	193.00	178.00—198.00	-	2	8	8	16	41	18	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Manufacturing.....	58	40.0	197.00	194.50	192.50—200.00	-	-	-	-	10	33	12	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Order clerks II.....	31	40.0	248.50	283.00	204.00—290.00	-	-	-	2	-	6	-	7	-	-	13	3	-	-	-	-	-	-	-	-	-	-	-
Accounting clerks.....	1,377	39.5	219.00	206.00	184.00—232.50	13	31	32	109	98	236	348	201	110	61	39	9	13	10	1	43	14	9	-	-	-	-	
Manufacturing.....	626	40.0	235.00	220.00	203.00—248.00	2	4	3	12	25	84	179	146	35	44	37	7	4	5	1	15	14	9	-	-	-	-	
Nonmanufacturing.....	751	39.5	205.50	195.50	172.00—220.00	11	27	29	97	73	152	169	55	75	17	2	2	9	5	-	28	-	-	-	-	-	-	
Transportation and utilities.....	80	39.5	284.50	260.00	192.00—402.00	-	-	2	14	-	9	9	5	-	2	-	-	6	5	-	28	-	-	-	-	-	-	-
Accounting clerks I.....	282	40.0	184.50	184.00	165.00—196.50	12	13	17	44	39	89	51	8	1	-	-	-	3	5	-	-	-	-	-	-	-	-	
Manufacturing.....	76	39.5	187.00	185.00	168.50—204.50	2	4	3	12	5	27	15	7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Nonmanufacturing.....	206	40.0	184.00	182.00	160.00—193.00	10	9	14	32	34	62	36	1	-	-	-	-	3	5	-	-	-	-	-	-	-	-	
Accounting clerks II.....	614	39.5	216.00	207.00	200.00—228.00	1	10	3	49	22	62	222	132	54	18	25	4	3	1	-	4	4	-	-	-	-	-	
Manufacturing.....	341	40.0	229.00	221.00	207.00—229.00	-	-	-	-	-	24	141	107	23	8	25	4	-	1	-	4	4	-	-	-	-	-	
Nonmanufacturing.....	273	39.0	200.50	200.00	174.00—220.00	1	10	3	49	22	38	81	25	31	10	-	-	3	-	-	-	-	-	-	-	-	-	
Accounting clerks III.....	282	39.5	211.00	201.50	180.00—226.00	-	8	12	12	29	59	67	51	24	5	-	-	4	4	-	6	-	1	-	-	-	-	
Manufacturing.....	124	40.0	224.50	206.50	187.00—226.00	-	-	-	-	20	33	23	24	4	5	-	-	4	4	-	6	-	1	-	-	-	-	
Nonmanufacturing.....	158	39.5	200.00	200.00	179.00—220.00	-	8	12	12	9	26	44	27	20	-	-	-	-	-	-	-	-	-	-	-	-	-	
Accounting clerks IV.....	199	40.0	287.50	271.00	224.00—387.50	-	-	-	4	8	26	8	10	31	38	14	5	3	-	1	33	10	8	-	-	-	-	
Manufacturing.....	85	40.0	316.50	273.00	264.00—400.50	-	-	-	-	-	-	-	8	7	31	12	3	-	-	1	5	10	8	-	-	-	-	
Nonmanufacturing.....	114	40.0	266.00	240.50	193.00—320.00	-	-	-	4	8	26	8	2	24	7	2	2	3	-	-	28	-	-	-	-	-	-	
Payroll clerks.....	214	39.5	244.00	238.00	210.00—260.00	-	-	8	4	8	16	24	50	49	20	15	8	-	1	1	5	5	-	-	-	-	-	
Manufacturing.....	131	39.5	262.50	259.00	230.00—280.00	-	-	1	-	4	7	9	22	36	17	15	8	-	1	1	5	5	-	-	-	-	-	
Nonmanufacturing.....	83	39.5	214.50	230.00	189.00—234.00	-	-	7	4	4	9	15	28	13	3	-	-	-	-	-	-	-	-	-	-	-	-	
Key entry operators.....	568	39.5	214.00	202.00	178.00—224.50	6	7	21	50	68	114	147	53	46	9	-	6	7	8	3	3	12	8	-	-	-	-	
Manufacturing.....	275	40.0	233.50	205.00	189.00—240.00	-	-	6	20	14	51	74	36	32	7	-	1	-	8	3	3	12	8	-	-	-	-	
Nonmanufacturing.....	293	39.0	196.00	191.00	171.00—215.50	6	7	15	30	54	63	73	17	14	2	-	5	7	-	-	-	-	-	-	-	-	-	
Key entry operators I.....	245	39.5	195.00	178.50	162.00—202.00	6	7	21	48	50	45	26	7	19	-	-	1	-	8	2	1	4	-	-	-	-	-	
Manufacturing.....	86	40.0	220.00	185.00	167.50—235.50	-	-	6	20	14	12	9	4	6	-	-	-	-	8	2	1	4	-	-	-	-	-	
Nonmanufacturing.....	159	39.0	181.50	175.00	160.00—195.00	6	7	15	28	36	33	17	3	13	-	-	1	-	-	-	-	-	-	-	-	-	-	
Key entry operators II.....	323	39.5	229.00	215.50	196.50—232.00	-	-	-	2	18	69	121	46	27	9	-	5	7	-	1	2	8	8	-	-	-	-	
Manufacturing.....	189	39.5	239.50	213.00	204.00—240.00	-	-	-	-	-	39	65	32	26	7	-	1	-	-	1	2	8	8	-	-	-	-	
Nonmanufacturing.....	134	39.0	213.50	215.50	189.00—215.50	-	-	-	2	18	30	56	14	1	2	-	4	7	-	-	-	-	-	-	-	-	-	

* Workers were distributed as follows: 10 at \$580.00 to \$620.00; and 8 at \$620.00 to \$660.00. Also see footnotes at end of tables.

Table A-2. Weekly earnings of professional and technical workers in Dayton, Ohio, December 1981

Occupation and industry division	Number of workers	Average weekly hours ¹ (stand-ard)	Weekly earnings (in dollars) ¹			Number of workers receiving straight-time weekly earnings (in dollars) of —																						
			Mean ²	Median ²	Middle range ³	160 and under 170	170 — 180	180 — 190	190 — 200	200 — 220	220 — 240	240 — 260	260 — 280	280 — 300	300 — 320	320 — 340	340 — 360	360 — 400	400 — 440	440 — 480	480 — 500	500 — 550	560 — 600	600 — 640	640 — 680	680 and over		
Computer systems analysts (business).....	465	39.5	505.00	499.50	437.00— 576.50	-	-	-	-	-	-	5	-	2	3	4	4	49	54	82	62	65	56	39	26	14		
Manufacturing.....	358	39.5	518.00	512.00	448.50— 584.50	-	-	-	-	-	-	-	-	-	-	1	-	40	38	64	45	51	45	35	25	14		
Nonmanufacturing.....	107	39.5	460.00	464.50	402.00— 530.50	-	-	-	-	-	-	5	-	2	3	3	4	9	18	18	17	14	11	4	1	-		
Computer systems analysts (business) I.....	54	39.5	426.00	386.00	340.50— 529.50	-	-	-	-	-	-	5	-	2	3	4	2	13	5	-	4	6	3	6	1	-		
Nonmanufacturing.....	27	39.0	337.50	342.00	305.50— 379.00	-	-	-	-	-	-	5	-	2	3	3	2	8	4	-	-	-	-	-	-	-		
Computer systems analysts (business) II.....	197	39.5	481.00	453.50	418.00— 498.50	-	-	-	-	-	-	-	-	-	-	-	2	35	45	53	22	2	4	8	14	12		
Manufacturing.....	168	39.5	484.50	456.00	417.50— 498.50	-	-	-	-	-	-	-	-	-	-	-	-	34	36	46	16	-	3	7	14	12		
Nonmanufacturing.....	29	39.0	461.00	452.00	420.00— 509.50	-	-	-	-	-	-	-	-	-	-	-	2	1	9	7	6	2	1	1	-	-		
Computer systems analysts (business) III.....	214	39.5	546.00	544.00	506.50— 587.50	-	-	-	-	-	-	-	-	-	-	-	-	1	4	29	36	57	49	25	11	2		
Manufacturing.....	183	39.5	553.00	552.00	514.00— 588.50	-	-	-	-	-	-	-	-	-	-	-	-	1	1	18	25	45	39	22	10	2		
Nonmanufacturing.....	51	39.5	523.50	528.50	470.00— 583.00	-	-	-	-	-	-	-	-	-	-	-	-	-	3	11	11	12	10	3	1	-		
Computer programmers (business).....	375	39.5	417.00	403.00	349.50— 481.00	-	-	-	-	-	1	11	8	24	21	14	25	73	61	42	38	25	15	7	4	6		
Manufacturing.....	200	40.0	462.00	451.00	397.00— 531.50	-	-	-	-	-	-	4	5	4	4	7	7	20	32	34	27	24	15	7	4	6		
Nonmanufacturing.....	175	39.5	366.00	375.00	314.50— 400.00	-	-	-	-	-	1	7	3	20	17	7	18	53	29	8	11	1	-	-	-	-		
Computer programmers (business) I.....	53	39.0	321.00	310.00	285.00— 364.00	-	-	-	-	-	-	4	5	9	10	6	5	13	1	-	-	-	-	-	-	-		
Manufacturing.....	28	39.0	315.50	316.00	261.00— 364.00	-	-	-	-	-	-	4	5	1	4	3	3	8	-	-	-	-	-	-	-	-		
Computer programmers (business) II.....	167	40.0	386.00	384.50	334.00— 437.00	-	-	-	-	-	1	7	3	15	11	7	11	40	32	25	10	5	-	-	-	-		
Manufacturing.....	80	40.0	434.50	436.50	420.00— 468.00	-	-	-	-	-	-	-	-	3	-	4	1	8	28	22	9	5	-	-	-	-		
Nonmanufacturing.....	87	39.5	341.00	354.00	290.50— 377.50	-	-	-	-	-	1	7	3	12	11	3	10	32	4	3	1	-	-	-	-	-		
Computer programmers (business) III.....	155	40.0	484.00	484.00	403.50— 548.00	-	-	-	-	-	-	-	-	-	-	1	9	20	28	17	28	20	15	7	4	6		
Manufacturing.....	92	40.0	530.50	534.50	479.00— 578.00	-	-	-	-	-	-	-	-	-	-	-	3	4	4	12	18	19	15	7	4	6		
Computer operators.....	548	39.5	285.00	269.00	253.00— 326.50	6	17	5	11	20	57	144	106	19	19	72	19	7	13	5	11	13	4	-	-	-		
Manufacturing.....	185	39.5	315.00	275.50	237.00— 354.50	-	-	2	8	7	36	20	27	14	13	8	6	6	5	5	11	13	4	-	-	-		
Computer operators I: Manufacturing.....	25	40.0	248.00	238.00	215.00— 259.00	-	-	2	4	3	6	4	2	2	-	-	-	-	1	1	-	-	-	-	-	-		
Computer operators II: Manufacturing.....	212	39.5	276.00	269.00	237.00— 275.00	-	3	-	6	7	41	25	88	10	9	-	5	3	1	4	6	3	1	-	-	-		
Manufacturing.....	100	39.5	293.50	255.50	228.00— 311.50	-	-	-	4	4	30	14	13	9	6	-	2	3	1	4	6	3	1	-	-	-		
Computer operators III: Manufacturing.....	166	39.5	342.50	326.50	307.00— 340.00	-	-	-	-	-	5	10	16	7	9	72	14	4	11	-	5	10	3	-	-	-		
Manufacturing.....	60	39.5	379.00	334.50	288.50— 510.50	-	-	-	-	-	-	2	12	3	7	8	4	3	3	-	5	10	3	-	-	-		
Drafters.....	995	41.5	375.50	358.00	294.00— 459.00	4	16	2	1	45	40	29	62	90	57	104	51	119	100	60	37	117	39	19	3	-		
Manufacturing.....	695	41.0	381.50	351.00	294.00— 500.50	-	10	-	1	35	30	14	44	72	43	67	43	77	59	21	16	112	34	14	3	-		
Nonmanufacturing.....	300	42.5	361.50	380.00	292.50— 436.50	4	6	2	-	10	10	15	18	18	14	37	8	42	41	39	21	5	5	5	-	-		
Drafters I.....	39	41.5	204.00	195.50	174.00— 220.00	3	16	-	1	8	3	3	3	-	1	-	1	-	-	-	-	-	-	-	-	-		
Drafters II.....	50	40.0	293.50	270.00	260.00— 331.00	-	-	-	-	4	2	-	21	-	9	5	5	3	1	-	-	-	-	-	-	-		
Manufacturing.....	43	40.0	291.50	268.00	260.00— 318.50	-	-	-	-	4	-	-	20	-	9	4	2	3	1	-	-	-	-	-	-	-		
Drafters III.....	217	41.5	275.00	267.00	226.00— 320.00	1	-	2	-	32	34	26	28	21	15	43	5	7	1	2	-	-	-	-	-	-		
Manufacturing.....	120	40.0	265.50	243.00	226.00— 298.00	-	-	-	-	26	28	14	15	7	3	17	4	3	1	2	-	-	-	-	-	-		

See footnotes at end of tables.

Table A-2. Weekly earnings of professional and technical workers in Dayton, Ohio, December 1981—Continued

Occupation and industry division	Number of workers	Average weekly hours ¹ (standard)	Weekly earnings (in dollars) ²			Number of workers receiving straight-time weekly earnings (in dollars) of —																					
			Mean ³	Median ³	Middle range ³	160 and under 170	170	180	190	200	220	240	260	280	300	320	340	360	380	400	440	480	520	560	600	640	680 and over
							180	190	200	220	240	260	280	300	320	340	360	380	400	440	480	520	560	600	640	680 and over	
Drafters IV.....	241	40.0	364.00	340.50	295.00- 387.00	-	-	-	-	1	1	-	8	63	15	27	18	61	1	18	11	13	6	-	-	-	-
Manufacturing.....	206	40.0	361.00	334.00	295.00- 383.50	-	-	-	-	-	1	-	7	61	14	24	13	52	-	4	11	13	6	-	-	-	-
Drafters V.....	448	42.5	454.50	447.50	381.50- 540.50	-	-	-	-	-	-	-	2	6	17	29	24	48	97	40	26	104	33	19	3	-	
Manufacturing.....	308	42.5	463.50	466.00	376.00- 543.00	-	-	-	-	-	-	-	2	4	17	22	23	19	57	15	5	99	28	14	3	-	
Electronics technicians.....	496	40.0	325.00	305.00	271.00- 371.00	-	-	-	-	-	10	80	62	65	48	54	40	57	39	30	13	-	-	-	-	-	
Nonmanufacturing.....	99	40.0	400.00	381.50	371.00- 457.00	-	-	-	-	-	2	2	2	1	4	3	4	32	22	14	13	-	-	-	-	-	
Transportation and utilities.....	76	40.0	401.00	371.00	371.00- 438.50	-	-	-	-	-	-	-	-	-	4	3	4	32	14	6	13	-	-	-	-	-	
Electronics technicians I.....	36	39.5	271.00	257.00	237.50- 302.00	-	-	-	-	-	10	8	2	1	11	4	-	-	-	-	-	-	-	-	-	-	
Electronics technicians II.....	318	40.0	305.50	296.50	260.00- 345.50	-	-	-	-	-	-	72	60	45	33	26	20	33	14	13	-	-	-	-	-	-	
Nonmanufacturing.....	55	40.0	380.00	371.00	371.00- 407.00	-	-	-	-	-	-	-	-	-	-	4	-	4	32	14	1	-	-	-	-	-	
Transportation and utilities.....	55	40.0	380.00	371.00	371.00- 407.00	-	-	-	-	-	-	-	-	-	-	4	-	4	32	14	1	-	-	-	-	-	
Electronics technicians III.....	144	40.0	382.00	375.00	322.50- 439.00	-	-	-	-	-	-	-	-	19	4	22	20	24	25	17	13	-	-	-	-	-	
Manufacturing.....	109	40.0	366.00	356.00	322.50- 398.50	-	-	-	-	-	-	-	-	18	4	22	20	24	17	4	-	-	-	-	-	-	
Registered industrial nurses.....	56	40.0	421.50	435.00	344.00- 495.00	-	-	-	-	-	-	-	-	2	1	7	3	3	7	6	9	15	3	-	-	-	
Manufacturing.....	56	40.0	421.50	435.00	344.00- 495.00	-	-	-	-	-	-	-	-	2	1	7	3	3	7	6	9	15	3	-	-	-	

See footnotes at end of tables.

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Dayton, Ohio, December 1981

Sex, ¹ occupation, and industry division	Number of workers	Average (mean) ²		Sex, ¹ occupation, and industry division	Number of workers	Average (mean) ²		Sex, ¹ occupation, and industry division	Number of workers	Average (mean) ²	
		Weekly hours ³ (stand-ard)	Weekly earnings (in dollars) ¹			Weekly hours ³ (stand-ard)	Weekly earnings (in dollars) ¹			Weekly hours ³ (stand-ard)	Weekly earnings (in dollars) ¹
Office occupations - men				File clerks II	58	39.5	199.00	Computer systems analysts (business) I	32	40.0	454.00
Accounting clerks:				Messengers	58	40.0	174.50	Computer systems analysts (business) II	152	39.5	495.00
Manufacturing	36	39.5	268.00	Manufacturing	35	40.0	178.00	Manufacturing	131	39.5	497.50
Accounting clerks IV	41	40.0	349.00	Switchboard operators	66	39.5	206.50	Computer systems analysts (business) III	191	39.5	552.50
Office occupations - women				Manufacturing	39	39.0	233.00	Manufacturing	148	39.5	558.50
Secretaries	1,505	39.0	278.50	Nonmanufacturing	27	39.5	167.50	Nonmanufacturing	43	39.5	532.50
Manufacturing	1,044	39.5	302.00	Switchboard operator-receptionists	248	39.5	193.50	Computer programmers (business)	260	39.5	437.00
Nonmanufacturing	461	38.5	225.50	Manufacturing	128	40.0	196.50	Manufacturing	144	40.0	485.00
Transportation and utilities	103	38.5	235.00	Nonmanufacturing	120	39.5	190.00	Nonmanufacturing	116	39.5	378.00
Secretaries I	104	38.5	205.50	Order clerks	109	40.0	194.50	Computer programmers (business) I	28	39.0	326.50
Manufacturing	66	39.0	232.50	Manufacturing	65	40.0	207.00	Manufacturing	106	40.0	399.50
Secretaries II	454	39.0	225.50	Order clerks I	93	40.0	188.50	Manufacturing	56	40.0	435.00
Manufacturing	253	39.0	236.00	Manufacturing	57	40.0	196.50	Nonmanufacturing	48	39.5	357.00
Nonmanufacturing	201	39.0	212.50	Accounting clerks	1,295	39.5	214.50	Computer programmers (business) II	126	40.0	493.50
Transportation and utilities	79	38.5	236.00	Manufacturing	590	40.0	233.00	Manufacturing	79	40.0	535.50
Secretaries III	551	39.5	293.00	Nonmanufacturing	705	39.5	199.50	Computer operators	253	39.5	307.50
Manufacturing	420	39.5	312.00	Transportation and utilities	59	39.5	244.00	Manufacturing	81	39.5	364.00
Nonmanufacturing	131	39.0	232.00	Accounting clerks I	282	40.0	184.50	Computer operators II	88	40.0	287.00
Secretaries IV	285	39.5	318.00	Manufacturing	76	39.5	187.00	Manufacturing	34	40.0	331.00
Manufacturing	207	40.0	335.00	Nonmanufacturing	206	40.0	184.00	Nonmanufacturing	54	40.0	259.00
Nonmanufacturing	58	39.5	257.00	Accounting clerks II	590	39.5	215.50	Computer operators III	108	39.5	358.50
Secretaries V	131	39.0	379.50	Manufacturing	334	40.0	229.00	Manufacturing	39	39.5	417.50
Manufacturing	98	39.5	406.50	Nonmanufacturing	256	39.0	198.00	Nonmanufacturing	69	40.0	325.00
Nonmanufacturing	33	37.5	299.00	Accounting clerks III	265	39.5	211.00	Drafters	920	41.5	376.50
Stenographers	177	39.5	270.00	Manufacturing	112	40.0	224.50	Manufacturing	650	41.0	381.50
Manufacturing	107	40.0	256.00	Nonmanufacturing	153	39.5	201.00	Nonmanufacturing	270	42.5	365.50
Stenographers I	104	39.5	240.50	Accounting clerks IV	158	40.0	271.50	Drafters I	31	42.0	192.00
Manufacturing	53	40.0	191.00	Manufacturing	68	40.0	316.00	Drafters II	47	40.0	289.50
Stenographers II	73	39.0	312.00	Nonmanufacturing	90	39.5	238.00	Manufacturing	42	40.0	288.50
Manufacturing	54	40.0	320.00	Payroll clerks	210	39.5	242.50	Drafters III	192	41.5	276.50
Transcribing-machine typists	176	40.0	213.50	Manufacturing	127	39.5	261.00	Manufacturing	105	40.0	267.00
Manufacturing	156	40.0	203.00	Nonmanufacturing	83	39.5	214.50	Drafters IV	235	40.0	364.00
Typists	329	39.5	191.00	Key entry operators	560	39.5	214.50	Manufacturing	201	40.0	361.00
Manufacturing	142	40.0	203.00	Manufacturing	272	40.0	233.50	Drafters V	415	42.0	454.00
Typists I	169	40.0	185.50	Nonmanufacturing	288	39.0	196.50	Manufacturing	287	42.5	461.50
Typists II	76	40.0	223.00	Key entry operators I	241	39.5	195.00	Electronics technicians	454	40.0	329.50
Manufacturing	52	40.0	190.00	Manufacturing	84	40.0	219.00	Manufacturing	358	40.0	310.50
Nonmanufacturing	101	39.5	167.50	Nonmanufacturing	157	39.0	182.00	Nonmanufacturing	96	40.0	402.00
File clerks I	94	39.5	180.50	Key entry operators II	319	39.5	229.50	Transportation and utilities	73	40.0	404.00
Manufacturing	33	40.0	176.50	Manufacturing	188	39.5	240.00				
Nonmanufacturing	61	39.5	151.50	Nonmanufacturing	131	39.0	214.00				
				Professional and technical occupations - men							
				Computer systems analysts (business)	375	39.5	521.00				
				Manufacturing	298	39.5	530.50				
				Nonmanufacturing	77	39.5	484.00				

See footnotes at end of tables.

Table A-3. Average weekly earnings of office, professional, and technical workers, by sex, in Dayton, Ohio, December 1981—Continued

Sex, ¹ occupation, and industry division	Number of workers	Average (mean) ²		Sex, ¹ occupation, and industry division	Number of workers	Average (mean) ²		Sex, ¹ occupation, and industry division	Number of workers	Average (mean) ²	
		Weekly hours ³ (stand-ard)	Weekly earnings (in dollars) ⁴			Weekly hours ³ (stand-ard)	Weekly earnings (in dollars) ⁴			Weekly hours ³ (stand-ard)	Weekly earnings (in dollars) ⁴
Electronics technicians II.....	287	40.0	308.50	Computer programmers (business).....	111	39.5	374.50	Computer operators III.....	54	39.5	316.50
Manufacturing.....	234	40.0	292.50	Manufacturing.....	56	39.5	403.00	Drafters.....	75	42.5	359.00
Nonmanufacturing.....	52	40.0	363.00	Nonmanufacturing.....	55	39.5	345.50	Manufacturing.....	45	43.0	381.50
Transportation and utilities.....	144	40.0	362.00	Computer programmers (business) II.....	59	40.0	363.50	Nonmanufacturing.....	30	42.0	325.50
Electronics technicians III.....	109	40.0	356.00	Nonmanufacturing.....	37	40.0	322.50	Drafters III.....	25	41.0	262.50
Professional and technical occupations - women				Computer programmers (business) III.....	29	39.5	443.00	Drafters V.....	33	45.0	480.00
Computer systems analysts (business).....	90	39.5	438.50	Computer operators.....	287	39.5	265.50	Registered industrial nurses.....	55	40.0	422.50
Manufacturing.....	60	39.5	458.50	Manufacturing.....	104	39.5	276.50	Manufacturing.....	55	40.0	422.50
Nonmanufacturing.....	30	39.0	399.00	Computer operators I.....	112	40.0	237.00				
Computer systems analysts (business) II.....	45	39.5	435.00	Computer operators II.....	121	39.5	269.50				
Manufacturing.....	37	39.5	439.50	Manufacturing.....	66	39.5	274.00				

See footnotes at end of tables.

Table A-4. Hourly earnings of maintenance, toolroom, and powerplant workers in Dayton, Ohio, December 1981

Occupation and industry division	Number of workers	Hourly earnings (in dollars) ^a			Number of workers receiving straight-time hourly earnings (in dollars) of —																								
		Mean ^b	Median ^b	Middle range ^b	5.20 and under 5.40	5.40	5.60	5.80	6.00	6.20	6.40	6.60	6.80	6.80	7.00	7.40	7.80	8.20	8.60	9.00	9.40	9.80	10.20	11.00	11.80	12.60	13.40	14.20	14.20 and over
					5.60	5.80	6.00	6.20	6.40	6.60	6.80	7.00	7.40	7.80	8.20	8.60	9.00	9.40	9.80	10.20	11.00	11.80	12.60	13.40	14.20				
Maintenance carpenters.....	104	12.06	13.52	10.69-13.54	-	-	-	-	1	-	-	-	-	-	1	2	2	-	5	1	6	4	5	15	3	-	59	-	
Manufacturing.....	88	12.87	13.52	11.64-13.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	4	5	14	3	-	59	-	
Maintenance electricians.....	812	12.39	13.54	10.65-13.76	-	-	-	-	-	-	-	-	-	-	1	7	1	36	2	2	35	93	55	34	41	-	505	-	
Manufacturing.....	789	12.46	13.60	10.83-13.76	-	-	-	-	-	-	-	-	-	-	-	7	1	36	-	-	32	93	40	34	41	-	505	-	
Maintenance painters.....	102	11.99	13.50	11.00-13.50	-	-	-	-	-	-	-	-	-	-	-	11	1	-	2	5	1	4	1	10	6	-	61	-	
Manufacturing.....	95	12.19	13.50	11.13-13.50	-	-	-	-	-	-	-	-	-	-	-	11	1	-	-	1	-	4	1	10	6	-	61	-	
Maintenance machinists.....	195	10.53	10.12	8.70-12.44	-	-	-	-	-	-	-	-	-	-	-	-	26	18	12	-	12	32	11	-	84	-	-	-	
Manufacturing.....	185	10.53	10.06	8.70-12.44	-	-	-	-	-	-	-	-	-	-	-	-	26	18	12	-	12	32	1	-	84	-	-	-	
Maintenance mechanics (machinery).....	794	12.22	13.75	10.65-13.76	7	-	-	-	-	-	-	-	7	-	15	3	11	20	18	4	32	4	146	26	30	-	483	8	
Manufacturing.....	724	12.47	13.75	10.91-13.76	-	-	-	-	-	-	-	-	-	-	8	3	4	20	18	4	32	4	112	26	30	-	483	-	
Nonmanufacturing.....	70	9.68	10.65	7.00-10.65	7	-	-	-	-	-	-	-	7	-	7	-	7	-	-	-	-	-	34	-	-	-	-	8	
Maintenance mechanics (motor vehicles).....	273	10.24	10.24	8.51-12.84	-	4	12	-	10	9	-	5	-	5	5	16	6	14	23	4	21	32	3	21	40	41	-	-	
Manufacturing.....	105	11.34	12.29	10.12-13.54	-	-	-	-	-	-	-	-	-	-	2	4	9	6	2	1	-	5	20	2	12	1	41	-	
Nonmanufacturing.....	168	9.56	9.38	7.00-12.51	-	4	12	-	10	9	-	5	-	3	1	7	2	12	22	4	16	12	1	9	39	-	-		
Transportation and utilities.....	118	9.88	10.05	7.67-12.84	-	4	12	-	-	8	-	4	-	1	1	7	1	12	-	4	16	-	-	9	39	-	-		
Maintenance pipefitters.....	424	13.11	13.54	13.52-13.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	11	24	-	-	361	-	
Manufacturing.....	424	13.11	13.54	13.52-13.54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	11	24	-	-	361	-	
Maintenance sheet-metal workers.....	280	13.37	13.54	13.52-13.54	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	11	8	-	258	-	
Manufacturing.....	280	13.37	13.54	13.52-13.54	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	11	8	-	258	-	
Millwrights.....	585	11.85	13.52	10.12-13.54	-	-	-	-	-	-	-	6	-	-	-	4	106	8	-	5	-	60	10	-	-	-	366	-	
Manufacturing.....	559	11.91	13.52	10.12-13.54	-	-	-	-	-	-	-	-	-	-	-	4	106	8	-	5	-	60	10	-	-	-	366	-	
Maintenance trades helpers.....	65	8.87	8.26	8.22-10.66	-	9	-	-	-	-	-	-	-	-	-	5	2	27	-	-	-	-	12	4	6	-	-	-	
Machine-tool operators (toolroom).....	719	13.33	13.64	13.64-13.77	-	-	-	-	-	-	-	-	-	-	1	-	6	3	3	4	6	1	47	1	-	-	647	-	
Manufacturing.....	719	13.33	13.64	13.64-13.77	-	-	-	-	-	-	-	-	-	-	1	-	6	3	3	4	6	1	47	1	-	-	647	-	
Tool and die makers.....	808	12.97	13.85	13.64-13.85	-	-	-	-	-	-	-	-	-	-	-	10	10	10	16	11	9	21	40	55	2	-	624	-	
Manufacturing.....	808	12.97	13.85	13.64-13.85	-	-	-	-	-	-	-	-	-	-	-	10	10	10	16	11	9	21	40	55	2	-	624	-	
Stationary engineers.....	196	10.73	10.12	7.39-13.54	-	-	-	-	-	-	-	-	-	-	51	3	-	12	6	-	-	32	-	8	4	-	80	-	
Manufacturing.....	196	10.73	10.12	7.39-13.54	-	-	-	-	-	-	-	-	-	-	51	3	-	12	6	-	-	32	-	8	4	-	80	-	

^a Workers were distributed as follows: 6 at \$15.00 to \$15.60; and 2 at \$15.60 to \$16.60.
Also see footnotes at end of tables.

Table A-5. Hourly earnings of material movement and custodial workers in Dayton, Ohio, December 1981

Occupation and industry division	Number of workers	Hourly earnings (in dollars) ^a			Number of workers receiving straight-time hourly earnings (in dollars) of —																							
		Mean ^b	Median ^b	Middle range ^b	3.20 and under 3.40	3.40-3.60	3.60-3.80	3.80-4.00	4.00-4.20	4.20-4.40	4.40-4.60	4.60-4.80	4.80-5.00	5.00-5.40	5.40-5.80	5.80-6.20	6.20-6.60	6.60-7.00	7.00-7.40	7.40-7.80	7.80-8.60	8.60-9.40	9.40-10.20	10.20-11.00	11.00-11.80	11.80-12.60	12.60-13.40	
Truckdrivers.....	1,187	8.51	8.00	6.25-10.60	14	7	-	-	40	22	12	30	-	85	52	23	71	43	53	48	145	125	112	23	22	47	215	
Manufacturing.....	269	8.80	8.44	7.15-11.25	-	-	-	-	-	-	18	-	-	-	10	1	8	28	6	32	57	34	2	-	22	47	4	
Nonmanufacturing.....	918	8.42	7.99	5.50-10.60	14	7	-	-	40	22	12	12	-	85	42	22	63	15	47	14	88	91	110	23	-	-	211	
Transportation and utilities.....	335	11.07	12.84	7.91-12.84	-	-	-	-	-	-	-	-	-	-	-	10	-	8	32	-	37	2	35	-	-	-	211	
Truckdrivers, light truck.....	297	8.93	12.84	4.75-12.84	14	7	-	-	26	13	12	12	-	18	10	-	20	4	-	10	2	-	-	-	-	-	149	
Nonmanufacturing.....	273	9.13	12.84	4.50-12.84	14	7	-	-	26	13	12	12	-	18	-	-	20	-	-	-	2	-	-	-	-	-	149	
Truckdrivers, medium truck.....	271	6.69	6.90	5.25- 7.52	-	-	-	-	14	-	-	-	-	18	-	6	13	42	31	17	25	49	8	-	-	-	8	
Manufacturing.....	70	6.56	6.92	5.04- 7.33	-	-	-	-	-	-	-	-	-	-	-	1	8	24	2	12	1	4	-	-	-	-	-	
Nonmanufacturing.....	201	6.73	6.50	5.25- 7.99	-	-	-	-	14	-	-	-	-	-	-	6	12	34	7	15	13	48	4	-	-	-	8	
Truckdrivers, heavy truck.....	154	7.03	7.91	5.50- 8.44	-	-	-	-	-	9	-	-	-	18	36	-	9	-	-	-	71	-	2	-	8	-	1	
Truckdrivers, tractor-trailer.....	291	9.85	9.92	9.05-11.50	-	-	-	-	-	-	-	-	-	-	9	-	10	-	8	4	11	11	87	55	23	-	51	
Manufacturing.....	50	10.18	12.39	7.70-12.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	10	10	-	-	-	-	22	4	
Nonmanufacturing.....	241	9.78	9.92	9.05-10.60	-	-	-	-	-	-	-	-	-	-	9	-	10	-	8	-	1	1	87	55	23	-	47	
Transportation and utilities.....	67	11.02	12.84	6.89-12.89	-	-	-	-	-	-	-	-	-	-	-	-	10	-	8	-	-	2	-	-	-	-	47	
Shippers.....	116	6.24	5.88	5.20- 7.57	-	-	-	-	-	10	-	10	-	29	9	9	2	8	6	7	26	-	-	-	-	-	-	
Manufacturing.....	86	6.48	6.79	5.25- 8.20	-	-	-	-	-	10	-	-	-	29	-	-	1	8	6	6	26	-	-	-	-	-	-	
Receivers.....	190	6.80	7.00	5.46- 7.93	-	-	-	-	1	3	-	11	1	30	13	1	17	15	45	3	21	21	8	-	-	-	-	
Manufacturing.....	69	7.45	7.23	5.80- 8.85	-	-	-	-	-	-	-	10	-	1	6	1	-	3	18	3	3	16	8	-	-	-	-	
Nonmanufacturing.....	121	6.43	6.65	5.00- 7.00	-	-	-	-	1	3	-	1	1	29	7	-	17	12	27	-	18	5	-	-	-	-	-	
Shippers and receivers.....	215	7.20	7.10	6.30- 8.22	-	-	-	-	-	18	4	-	4	8	6	2	32	20	34	20	48	1	6	-	-	12	-	
Manufacturing.....	162	7.17	7.10	6.30- 8.22	-	-	-	-	-	18	-	-	4	4	6	2	32	20	26	20	38	-	-	-	-	12	-	
Nonmanufacturing.....	33	7.37	8.04	7.05- 8.04	-	-	-	-	-	-	4	-	-	4	-	-	-	-	8	-	10	1	6	-	-	12	-	
Warehousemen.....	690	7.54	7.20	6.95- 8.10	-	-	-	-	-	-	-	-	-	48	10	2	9	222	57	-	275	33	25	-	7	2	-	
Manufacturing.....	455	7.63	6.95	6.95- 8.10	-	-	-	-	-	-	-	-	-	-	10	-	-	220	-	-	200	2	16	-	7	-	-	
Nonmanufacturing.....	235	7.35	7.20	6.63- 8.45	-	-	-	-	-	-	-	-	-	48	-	2	9	2	57	-	75	31	9	-	-	2	-	
Transportation and utilities.....	93	7.78	7.05	7.05- 8.45	-	-	-	-	-	-	-	-	-	2	-	-	-	2	52	-	25	1	9	-	-	2	-	
Order fillers.....	347	6.82	6.65	5.15- 8.30	-	-	-	-	-	6	24	14	30	30	30	12	6	32	-	-	78	85	-	-	-	-	-	
Nonmanufacturing.....	317	6.68	6.65	5.00- 8.85	-	-	-	-	-	6	24	14	30	30	30	12	6	32	-	-	48	85	-	-	-	-	-	
Shipping packers.....	431	9.55	11.62	6.21-11.94	-	-	-	-	-	-	3	43	13	1	-	-	-	86	-	8	-	6	5	1	-	82	183	
Material handling laborers.....	689	7.77	6.63	4.55-11.58	-	-	39	39	32	22	45	23	6	39	26	7	50	59	6	29	8	13	10	-	92	82	62	
Manufacturing.....	330	9.49	11.38	6.63-11.69	-	-	-	-	-	-	-	4	-	-	2	4	3	46	56	-	26	2	13	-	-	92	82	
Forklift operators.....	747	9.40	8.98	7.85-11.66	-	-	-	-	-	-	-	-	-	-	-	-	12	-	129	9	26	72	217	-	8	274	-	
Manufacturing.....	674	9.47	8.99	7.60-11.66	-	-	-	-	-	-	-	-	-	-	-	-	12	-	125	9	26	60	160	-	8	274	-	
Guards.....	846	6.94	6.61	3.50-12.11	184	56	109	4	10	11	1	5	3	4	10	3	9	22	83	13	5	94	-	1	-	219	-	
Manufacturing.....	451	9.84	9.28	7.21-12.11	-	-	-	-	-	4	-	-	-	-	7	-	9	21	83	13	-	94	-	1	-	219	-	
Nonmanufacturing.....	395	3.64	3.45	3.35- 3.60	184	56	109	4	10	7	1	5	3	4	3	3	-	1	-	-	5	-	-	-	-	-	-	
Guards I.....	786	6.82	5.67	3.45-12.11	184	56	109	4	10	10	1	3	3	4	10	2	9	22	83	13	5	38	-	1	-	219	-	
Manufacturing.....	395	9.99	12.11	7.21-12.11	-	-	-	-	-	4	-	-	-	-	7	-	9	21	83	13	-	38	-	1	-	219	-	
Nonmanufacturing.....	391	3.62	3.45	3.35- 3.60	184	56	109	4	10	6	1	3	3	4	3	2	-	1	-	-	5	-	-	-	-	-	-	
Janitors, porters, and cleaners.....	1,787	6.84	6.20	3.35-11.25	469	19	62	19	36	42	26	10	10	62	41	96	57	30	105	74	17	109	18	-	485	-		
Manufacturing.....	1,034	8.88	9.04	6.56-11.26	-	1	13	10	5	6	15	2	2	50	13	91	52	22	67	56	16	92	18	-	483	-		
Nonmanufacturing.....	753	4.03	3.35	3.35- 4.11	469	18	49	9	31	36	11	8	8	12	28	5	5	8	18	18	1	17	-	-	2	-	-	
Transportation and utilities.....	73	6.75	7.05	5.73- 7.69	-	-	3	-	-	4	4	-	-	-	9	-	4	8	16	16	1	2	-	-	2	-	-	
See footnotes at end of tables																												

See footnotes at end of tables.

Table A-6. Average hourly earnings of maintenance, toolroom, powerplant, material movement, and custodial workers, by sex, in Dayton, Ohio, December 1981

Sex, ¹ occupation, and industry division	Number of workers	Average (mean) ² hourly earnings (in dollars) ³	Sex, ⁴ occupation, and industry division	Number of workers	Average (mean) ² hourly earnings (in dollars) ³	Sex, ⁵ occupation, and industry division	Number of workers	Average (mean) ² hourly earnings (in dollars) ³
Maintenance, toolroom, and powerplant occupations - men			Stationary engineers.....	196	10.73	Order filers.....	271	7.30
Maintenance carpenters.....	104	12.06	Manufacturing.....	196	10.73	Nonmanufacturing.....	241	7.18
Manufacturing.....	88	12.67	Material movement and custodial occupations - men			Material handling laborers.....	513	8.74
Maintenance electricians.....	811	12.39	Truckdrivers.....	1,170	8.45	Manufacturing.....	317	9.46
Manufacturing.....	788	12.46	Manufacturing.....	269	8.80	Nonmanufacturing.....	196	7.57
Maintenance painters.....	102	11.99	Nonmanufacturing.....	801	8.34	Forklift operators.....	706	9.50
Manufacturing.....	95	12.19	Transportation and utilities.....	318	10.98	Manufacturing.....	633	9.59
Maintenance machinists.....	195	10.53	Truckdrivers, light truck.....	280	8.70	Guards.....	768	6.93
Manufacturing.....	185	10.53	Nonmanufacturing.....	256	8.89	Manufacturing.....	408	9.84
Maintenance mechanics (machinery).....	794	12.22	Truckdrivers, medium truck.....	271	6.69	Nonmanufacturing.....	380	3.64
Manufacturing.....	724	12.47	Manufacturing.....	70	6.56	Guards I.....	714	6.81
Nonmanufacturing.....	70	9.66	Nonmanufacturing.....	201	6.73	Manufacturing.....	358	9.99
Maintenance mechanics (motor vehicles).....	273	10.24	Truckdrivers, heavy truck.....	154	7.03	Nonmanufacturing.....	356	3.63
Manufacturing.....	105	11.34	Truckdrivers, tractor-trailer.....	291	9.85	Janitors, porters, and cleaners.....	1,210	7.66
Nonmanufacturing.....	168	9.56	Manufacturing.....	50	10.18	Manufacturing.....	820	9.37
Transportation and utilities.....	118	9.88	Nonmanufacturing.....	241	9.78	Nonmanufacturing.....	390	4.07
Maintenance pipefitters.....	424	13.11	Transportation and utilities.....	87	11.02	Material movement and custodial occupations - women		
Manufacturing.....	424	13.11	Shippers.....	102	6.29	Shipping packers.....	262	8.86
Maintenance sheet-metal workers.....	280	13.37	Manufacturing.....	73	6.63	Manufacturing.....	224	9.56
Manufacturing.....	280	13.37	Receivers.....	164	6.76	Forklift operators.....	41	7.58
Milwrights.....	565	11.85	Manufacturing.....	83	7.54	Manufacturing.....	41	7.58
Manufacturing.....	559	11.91	Nonmanufacturing.....	101	6.27	Guards.....	78	7.04
Maintenance trades helpers.....	56	9.39	Shippers and receivers.....	201	7.14	Manufacturing.....	43	9.85
Machine-tool operators (toolroom).....	718	13.33	Manufacturing.....	172	7.03	Nonmanufacturing.....	35	3.59
Manufacturing.....	718	13.33	Nonmanufacturing.....	29	7.77	Guards I.....	72	6.90
Tool and die makers.....	808	12.97	Warehousemen.....	677	7.50	Manufacturing.....	37	10.02
Manufacturing.....	808	12.97	Manufacturing.....	455	7.63	Nonmanufacturing.....	35	3.59
			Nonmanufacturing.....	222	7.23	Janitors, porters, and cleaners.....	542	4.99
			Transportation and utilities.....	80	7.50	Manufacturing.....	214	7.02

See footnotes at end of tables.

Table A-7. Indexes of earnings and percent increases for selected occupational groups, Dayton, Ohio, selected periods

Period ^a	All industries					Manufacturing					Nonmanufacturing			
	Office clerical	Electronic data processing	Industrial nurses	Skilled maintenance	Unskilled plant	Office clerical	Electronic data processing	Industrial nurses	Skilled maintenance	Unskilled plant	Office clerical	Electronic data processing	Industrial nurses	Unskilled plant
Indexes (December 1977 = 100):														
December 1980.....	127.1	126.1	133.2	133.1	137.8	126.9	126.5	133.8	133.5	134.2	127.7	(*)	(*)	128.9
December 1981.....	136.2	137.7	144.8	144.8	144.5	137.3	136.5	145.4	145.4	147.2	138.6	(*)	(*)	138.3
Percent increases:														
December 1972 to December 1973.....	6.0	(*)	5.4	6.5	7.4	6.4	(*)	5.2	6.4	7.9	5.3	(*)	(*)	5.8
December 1973 to December 1974.....	7.7	6.6	9.4	8.8	9.9	7.6	6.7	9.1	9.0	10.0	7.6	(*)	(*)	9.7
December 1974 to December 1975.....	7.2	7.4	10.6	6.8	7.6	7.4	8.3	10.6	6.6	8.7	6.6	(*)	(*)	3.0
December 1975 to December 1976.....	6.2	3.9	4.4	7.2	6.5	7.0	4.8	4.0	7.5	7.1	4.7	(*)	(*)	4.8
December 1976 to December 1977.....	6.6	8.0	6.1	9.4	6.6	6.6	7.1	6.3	9.2	9.5	6.6	(*)	(*)	5.6
December 1977 to December 1978.....	7.5	6.1	9.9	9.6	9.0	7.4	6.2	10.4	9.8	8.9	7.9	(*)	(*)	9.2
December 1978 to December 1979.....	7.8	8.1	9.4	10.1	10.3	8.1	8.2	9.5	10.3	10.9	7.4	(*)	(*)	9.0
December 1979 to December 1980.....	9.7	9.9	10.8	10.3	10.3	9.3	10.1	10.7	10.2	11.1	10.2	(*)	(*)	8.3
December 1980 to December 1981.....	8.7	9.2	8.7	8.8	9.0	8.2	7.9	8.7	8.9	9.7	9.3	(*)	(*)	7.3

See footnotes at end of tables.

Table A-8. Pay relationships in establishments with paired office clerical occupations, Dayton, Ohio, December 1981

Occupation for which earnings are compared	Occupation for which average earnings equal 100																									
	Secretaries					Stenographers		Transcribing-machine typists	Typists		File clerks		Messengers	Switchboard operators	Switchboard operator-receptionists	Order clerks		Accounting clerks				Payroll clerks	Key entry operators			
	I	II	III	IV	V	I	II		I	II	I	II				I	II	I	II	I	II		III	IV	I	II
Secretaries I.....	100	87	76	68	55	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	87	(*)	(*)	(*)	(*)	102	94	79	(*)	85	116	105	
Secretaries II.....	115	100	86	79	69	116	99	114	123	121	132	121	118	110	118	120	(*)	112	104	105	88	101	133	114		
Secretaries III.....	132	117	100	86	75	130	111	129	141	112	146	127	137	112	110	128	102	130	118	110	96	105	134	115		
Secretaries IV.....	146	127	117	100	85	154	125	155	158	138	169	148	164	121	141	154	113	152	135	130	107	118	150	133		
Secretaries V.....	183	145	133	117	100	186	133	154	165	148	196	164	180	145	142	(*)	(*)	183	149	141	118	139	175	147		
Stenographers I.....	(*)	86	77	65	54	100	84	(*)	109	111	117	128	121	(*)	104	(*)	(*)	100	87	(*)	(*)	74	123	97		
Stenographers II.....	(*)	101	90	75	67	119	100	116	128	113	(*)	130	114	98	102	(*)	(*)	111	98	(*)	86	97	116	108		
Transcribing-machine typists.....	(*)	88	77	65	55	(*)	87	100	(*)	(*)	(*)	121	(*)	98	104	109	(*)	94	104	(*)	78	88	(*)	101		
Typists I.....	(*)	81	71	63	61	92	78	(*)	100	89	108	(*)	101	(*)	(*)	(*)	(*)	94	91	(*)	74	83	96	85		
Typists II.....	(*)	82	90	72	67	90	86	(*)	113	100	117	107	117	(*)	98	(*)	(*)	89	87	(*)	75	88	105	91		
File clerks I.....	(*)	76	69	59	51	85	(*)	(*)	92	85	100	98	101	81	95	(*)	(*)	89	74	94	69	74	92	79		
File clerks II.....	(*)	83	79	68	61	78	77	83	(*)	93	102	100	103	83	(*)	(*)	(*)	91	84	(*)	66	81	102	85		
Messengers.....	(*)	85	73	61	56	83	86	(*)	99	85	99	97	100	(*)	101	(*)	(*)	100	81	(*)	66	79	96	84		
Switchboard operators.....	114	91	90	83	69	(*)	102	104	(*)	(*)	123	121	(*)	100	(*)	(*)	(*)	101	91	93	82	86	119	98		
Switchboard operator-receptionists.....	(*)	85	91	71	70	96	98	96	(*)	102	105	(*)	99	(*)	100	113	80	101	84	100	89	81	111	107		
Order clerks I.....	(*)	83	78	65	(*)	(*)	(*)	92	(*)	(*)	(*)	(*)	(*)	(*)	89	100	(*)	(*)	91	99	82	84	(*)	94		
Order clerks II.....	(*)	(*)	98	88	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	125	(*)	100	(*)	128	124	106	116	(*)	128	
Accounting clerks I.....	98	89	77	66	55	100	90	106	106	112	112	110	100	99	99	(*)	(*)	100	83	79	77	83	104	91		
Accounting clerks II.....	106	96	85	74	67	115	103	96	110	114	136	119	124	110	119	110	78	121	100	87	76	91	119	102		
Accounting clerks III.....	126	96	91	77	71	(*)	(*)	(*)	(*)	(*)	106	(*)	(*)	108	100	101	81	127	115	100	86	94	120	105		
Accounting clerks IV.....	(*)	113	105	93	85	(*)	117	128	136	134	144	152	151	122	112	122	94	130	131	116	100	113	141	121		
Payroll clerks.....	117	99	85	84	72	134	103	114	121	113	135	123	127	116	124	119	86	121	110	107	89	100	129	116		
Key entry operators I.....	86	75	75	66	57	81	86	(*)	105	95	108	98	104	84	90	(*)	(*)	96	84	83	71	78	100	83		
Key entry operators II.....	95	88	87	75	68	103	92	99	118	109	126	118	119	102	94	106	78	110	98	95	83	86	120	100		

NOTE: This matrix table shows the average (mean) relationship of earnings in establishments between any two occupations compared. Earnings for an occupation in the table stub are expressed as a percent of the earnings for an occupation in the column heading at the point where the data lines for the two intersect. For example, reading across the Secretaries II row, the 115 in the Secretaries I column indicates that Secretaries II average 115 percent of (or 15 percent

more than) the earnings of Secretaries I.

See appendix A for method of computation.

Also see footnotes at end of tables.

Table A-9. Pay relationships in establishments with paired professional and technical occupations, Dayton, Ohio, December 1981

Occupation for which earnings are compared	Occupation for which average earnings equal 100																
	Computer systems analysts (business)			Computer programmers (business)			Computer operators		Drafters					Electronics technicians			Registered industrial nurses
	I	II	III	I	II	III	II	III	I	II	III	IV	V	I	II	III	
Computer systems analysts (business) I	100	85	75	(*)	112	(*)	123	117	(*)	(*)	122	(*)	(*)	(*)	(*)	(*)	(*)
Computer systems analysts (business) II	118	100	84	141	130	110	160	137	(*)	(*)	145	130	119	193	(*)	(*)	(*)
Computer systems analysts (business) III	133	119	100	168	149	120	198	169	192	173	180	154	140	(*)	(*)	128	147
Computer programmers (business) I	(*)	71	60	100	83	73	118	105	(*)	(*)	(*)	(*)	103	139	(*)	(*)	(*)
Computer programmers (business) II	89	77	67	120	100	84	122	102	(*)	127	110	97	95	156	(*)	96	104
Computer programmers (business) III	(*)	91	83	137	119	100	141	117	(*)	150	127	113	108	168	138	120	(*)
Computer operators II	81	63	50	85	82	71	100	86	108	104	94	83	78	90	77	75	93
Computer operators III	85	73	59	95	96	86	117	100	(*)	(*)	109	99	89	(*)	102	(*)	(*)
Drafters I	(*)	(*)	52	(*)	(*)	(*)	92	(*)	100	85	88	62	48	(*)	(*)	(*)	(*)
Drafters II	(*)	(*)	58	(*)	79	67	96	(*)	118	100	86	76	70	(*)	(*)	70	78
Drafters III	82	69	55	(*)	91	79	107	91	148	117	100	82	64	(*)	81	76	92
Drafters IV	(*)	77	65	(*)	103	89	120	102	160	132	123	100	86	(*)	100	92	104
Drafters V	(*)	84	71	97	105	93	129	113	208	143	157	116	100	121	(*)	97	115
Electronics technicians I	(*)	52	(*)	72	64	59	111	(*)	(*)	(*)	(*)	(*)	82	100	(*)	(*)	(*)
Electronics technicians II	(*)	(*)	(*)	(*)	(*)	72	130	98	(*)	(*)	(*)	(*)	100	(*)	(*)	(*)	(*)
Electronics technicians III	(*)	(*)	78	(*)	104	83	134	(*)	(*)	143	132	109	103	(*)	(*)	100	106
Registered industrial nurses	(*)	(*)	68	(*)	96	(*)	108	(*)	(*)	127	109	96	87	(*)	(*)	94	100

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

Table A-10. Pay relationships in establishments with paired maintenance, toolroom, and powerplant occupations, Dayton, Ohio, December 1981

Occupation for which earnings are compared	Occupation for which average earnings equal 100												
	Carpenters	Electricians	Painters	Machinists	Mechanics		Pipefitters	Sheet-metal workers	Millwrights	Trades helpers	Machine-tool operators (toolroom)	Tool and die makers	Stationary engineers
					Machinery	Motor vehicles							
Maintenance carpenters.....	100	99	101	(*)	98	100	100	100	100	(*)	99	98	100
Maintenance electricians.....	101	100	102	101	100	102	101	101	101	120	100	99	101
Maintenance painters.....	99	98	100	(*)	97	98	100	99	100	(*)	99	98	100
Maintenance machinists.....	(*)	99	(*)	100	100	104	(*)	(*)	(*)	(*)	(*)	96	103
Maintenance mechanics (machinery).....	102*	100	103	100	100	102	102	102	101	120	101	99	101
Maintenance mechanics (motor vehicles).....	100	98	102	98	98	100	100	100	100	113	99	98	100
Maintenance pipefitters.....	100	99	100	(*)	99	100	100	100	100	(*)	99	98	100
Maintenance sheet-metal workers.....	100	99	101	(*)	99	100	100	100	100	(*)	99	98	100
Millwrights.....	100	99	100	(*)	99	100	100	100	100	(*)	99	98	100
Maintenance trades helpers.....	(*)	83	(*)	(*)	84	89	(*)	(*)	(*)	100	(*)	(*)	(*)
Machine-tool operators (toolroom).....	101	100	101	(*)	99	101	101	101	101	(*)	100	98	101
Tool and die makers.....	102	101	102	104	101	102	102	102	102	(*)	102	100	102
Stationary engineers.....	100	99	100	98	99	100	100	100	99	(*)	99	98	100

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

Table A-9. Pay relationships in establishments with paired professional and technical occupations, Dayton, Ohio, December 1981

Occupation for which earnings are compared	Occupation for which average earnings equal 100																
	Computer systems analysts (business)			Computer programmers (business)			Computer operators		Drafters					Electronics technicians			Registered industrial nurses
	I	II	III	I	II	III	II	III	I	II	III	IV	V	I	II	III	
Computer systems analysts (business) I.....	100	85	75	(*)	112	(*)	123	117	(*)	(*)	122	(*)	(*)	(*)	(*)	(*)	(*)
Computer systems analysts (business) II.....	118	100	84	141	130	110	160	137	(*)	(*)	145	130	119	183	(*)	(*)	(*)
Computer systems analysts (business) III.....	133	119	100	166	149	120	198	180	192	173	180	154	140	(*)	(*)	128	147
Computer programmers (business) I.....	(*)	71	60	100	83	73	118	105	(*)	(*)	(*)	(*)	103	139	(*)	(*)	(*)
Computer programmers (business) II.....	89	77	67	120	100	84	122	102	(*)	127	110	97	95	156	(*)	96	104
Computer programmers (business) III.....	(*)	91	83	137	119	100	141	117	(*)	150	127	113	108	168	138	120	(*)
Computer operators II.....	81	63	50	85	82	71	100	86	108	104	94	83	78	90	77	75	93
Computer operators III.....	85	73	59	95	98	86	117	100	(*)	(*)	109	99	89	(*)	102	(*)	(*)
Drafters I.....	(*)	(*)	52	(*)	(*)	(*)	92	(*)	100	85	68	62	48	(*)	(*)	(*)	(*)
Drafters II.....	(*)	(*)	58	(*)	79	67	96	(*)	118	100	86	76	70	(*)	(*)	(*)	(*)
Drafters III.....	82	69	55	(*)	91	79	107	91	148	117	100	82	64	(*)	(*)	70	78
Drafters IV.....	(*)	77	65	(*)	103	89	120	102	160	132	123	100	86	(*)	81	76	92
Drafters V.....	(*)	84	71	97	105	93	129	113	208	143	157	118	100	121	(*)	92	104
Electronics technicians I.....	(*)	52	(*)	72	64	59	111	(*)	(*)	(*)	(*)	(*)	82	100	(*)	(*)	115
Electronics technicians II.....	(*)	(*)	(*)	(*)	(*)	72	130	98	(*)	(*)	124	100	(*)	(*)	100	(*)	(*)
Electronics technicians III.....	(*)	(*)	78	(*)	104	83	134	(*)	(*)	143	132	109	103	(*)	(*)	100	(*)
Registered industrial nurses.....	(*)	(*)	68	(*)	96	(*)	108	(*)	(*)	127	109	96	87	(*)	(*)	94	100

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

Table A-10. Pay relationships in establishments with paired maintenance, toolroom, and powerplant occupations, Dayton, Ohio, December 1981

Occupation for which earnings are compared	Occupation for which average earnings equal 100												
	Carpenters	Electricians	Painters	Machinists	Mechanics		Pipefitters	Sheet-metal workers	Millwrights	Trades helpers	Machine-tool operators (toolroom)	Tool and die makers	Stationary engineers
					Machinery	Motor vehicles							
Maintenance carpenters.....	100	99	101	(*)	98	100	100	100	100	(*)	99	98	100
Maintenance electricians.....	101	100	102	101	100	102	101	101	101	120	100	99	101
Maintenance painters.....	99	98	100	(*)	97	98	100	99	100	(*)	99	98	100
Maintenance machinists.....	(*)	99	(*)	100	100	104	(*)	(*)	(*)	(*)	(*)	96	103
..... (machinery).....	102*	100	103	100	100	102	102	102	101	120	101	99	101
Maintenance mechanics.....	100	98	102	98	98	100	100	100	100	113	99	98	100
..... (motor vehicles).....	100	99	100	(*)	99	100	100	100	100	(*)	99	98	100
Maintenance pipefitters.....	100	99	101	(*)	99	100	100	100	100	(*)	99	98	100
Maintenance sheet-metal workers.....	100	99	101	(*)	99	100	100	100	100	(*)	99	98	100
Millwrights.....	100	99	100	(*)	99	100	100	100	100	(*)	99	98	101
Maintenance trades helpers.....	(*)	83	(*)	(*)	84	89	(*)	(*)	100	(*)	99	98	101
Machine-tool operators (toolroom).....	101	100	101	(*)	99	101	101	101	101	(*)	100	98	101
Tool and die makers.....	102	101*	102	104	101	102	102	102	102	(*)	102	100	102
Stationary engineers.....	100	99	100	98	99	100	100	100	99	(*)	99	98	100

See table A-6 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

Table A-11. Pay relationships in establishments with paired material movement and custodial occupations, Dayton, Ohio, December 1981

Occupation for which earnings are compared	Occupation for which average earnings equal 100													
	Truckdrivers				Shippers	Receivers	Shippers and receivers	Warehousemen	Order fillers	Shipping packers	Material handling laborers	Forklift operators	Guards	Janitors, porters, and cleaners
	Light truck	Medium truck	Heavy truck	Tractor-trailer									I	
Truckdrivers, light truck.....	100	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	112
Truckdrivers, medium truck.....	(*)	100	(*)	(*)	(*)	115	(*)	(*)	(*)	(*)	(*)	104	104	118
Truckdrivers, heavy truck.....	(*)	(*)	100	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	104	(*)	(*)
Truckdrivers, tractor-trailer.....	(*)	(*)	(*)	100	(*)	(*)	(*)	(*)	(*)	(*)	(*)	106	(*)	116
Shippers.....	(*)	(*)	(*)	(*)	100	99	(*)	101	(*)	(*)	(*)	84	83	102
Receivers.....	(*)	87	(*)	(*)	101	100	(*)	101	103	125	(*)	101	95	118
Shippers and receivers.....	(*)	(*)	(*)	(*)	(*)	(*)	100	101	(*)	(*)	(*)	98	111	110
Warehousemen.....	(*)	(*)	(*)	(*)	99	99	99	100	(*)	(*)	(*)	98	113	115
Order fillers.....	(*)	(*)	(*)	(*)	(*)	97	(*)	(*)	100	(*)	(*)	(*)	(*)	121
Shipping packers.....	(*)	(*)	(*)	(*)	(*)	80	(*)	(*)	(*)	100	(*)	99	(*)	105
Material handling laborers.....	(*)	(*)	(*)	(*)	118	(*)	(*)	(*)	(*)	(*)	100	99	97	104
Forklift operators.....	(*)	97	96	94	121	99	102	(*)	(*)	101	101	100	98	106
Guards I.....	(*)	96	(*)	(*)	(*)	105	90	88	(*)	(*)	103	102	100	109
Janitors, porters, and cleaners.....	90	84	(*)	86	99	85	91	87	83	95	96	94	92	100

See table A-8 for description of these pay relationships and appendix A for method of computation.
Also see footnotes at end of tables.

¹ Standard hours reflect the workweek for which employees receive their regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates), and the earnings correspond to these weekly hours.

² The mean is computed for each job by totaling the earnings of all workers and dividing by the number of workers. The median designates position—half of the workers receive the same or more and half receive the same or less than the rate shown. The middle range is defined by two rates of pay; one-fourth of the workers earn the same or less than the lower of these rates and one-fourth earn the same or more than the higher rate.

* Earnings data relate only to workers whose sex identification was provided by the establishment.

* Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.

* Estimates for periods ending prior to 1976 relate to men only for skilled maintenance and unskilled plant workers. All other estimates relate to men and women.

* Data do not meet publication criteria or data not available.

Appendix A. Scope and Method of Survey

In each of the 71 areas¹ currently surveyed, the Bureau obtains wages and related benefits data from representative establishments within six broad industry divisions: Manufacturing; transportation, communication, and other public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services. Government operations and the construction and extractive industries are excluded. Small establishments—generally those with fewer than 50 employees—are excluded because they have few incumbents in the occupations studied. Appendix table 1 shows the number of establishments and workers estimated to be within the scope of this survey, as well as the number actually studied.

Bureau field representatives obtain data by personal visits at 3-year intervals. In each of the two intervening years, information on employment and occupational earnings only is collected by a combination of personal visit, mail questionnaire, and telephone interview from establishments participating in the previous survey.

A sample of the establishments in the scope of the survey is selected for study prior to each personal visit survey. This sample, minus establishments which go out of business or are no longer within the industrial scope of the survey, is retained for the following two annual surveys. In most cases, establishments new to the area are not considered in the scope of the survey until the selection of a sample for a personal visit survey.

The sampling procedures involve detailed stratification of all establishments within the scope of an individual area survey by industry and number of employees. From this stratified universe a probability sample is selected, with each establishment having a predetermined chance of selection. To obtain optimum accuracy at minimum cost, a greater proportion of large than small establishments is selected. When data are combined, each establishment is weighted according to its probability of selection so that unbiased estimates are generated. For example, if one out of four establishments is selected, it is given a weight of 4 to represent itself plus three others. An alternate of the same original probability is chosen in the same industry-size classification if data are not available from the original sample member. If no suitable substitute is available, additional weight is assigned to a sample member that is similar to the missing unit.

Occupations and earnings

Occupations selected for study are common to a variety of manufacturing and nonmanufacturing industries, and are of the following types: (1) Office clerical; (2) professional and technical; (3) maintenance, toolroom, and powerplant; and (4) material

movement and custodial. Occupational classification is based on a uniform set of job descriptions designed to take account of interestablishment variation in duties within the same job. Occupations selected for study are listed and described in appendix B.

Unless otherwise indicated, the earnings data following the job titles are for all industries combined. Earnings data for some of the occupations listed and described, or for some industry divisions within the scope of the survey, are not presented in the A-series tables because either (1) data were insufficient to provide meaningful statistical results, or (2) there is possibility of disclosure of individual establishment data. Separate men's and women's earnings data are not presented when the number of workers not identified by sex is 20 percent or more of the men or women identified in an occupation. Earnings data not shown separately for industry divisions are included in data for all industries combined. Likewise, for occupations with more than one level, data are included in the overall classification when a subclassification is not shown or information to subclassify is not available.

Occupational employment and earnings data are shown for full-time workers, i.e., those hired to work a regular weekly schedule. Earnings data exclude premium pay for overtime and for work on weekends, holidays, and late shifts. Nonproduction bonuses are excluded, but cost-of-living allowances and incentive bonuses are included. Weekly hours for office clerical and professional and technical occupations refer to the standard workweek (rounded to the nearest half hour) for which employees receive regular straight-time salaries (exclusive of pay for overtime at regular and/or premium rates). Average weekly earnings for these occupations are rounded to the nearest half dollar. Most A-series tables provide distributions of workers by earnings; changes in the size of earnings intervals are indicated by heavy vertical lines.

These surveys measure the level of occupational earnings in an area at a particular time. Changes in an occupational average over time reflect, in addition to earnings changes, factors such as changes in proportions of workers employed by high- or low-wage firms, or high-wage workers advancing to better jobs and being replaced by new workers at lower rates. Such shifts in employment could decrease an occupational average even though most establishments in an area increase wages during the year. Changes in earnings of occupational groups, shown in table A-7, are better indicators of wage trends than are earnings changes for individual jobs within the groups.

Average earnings reflect composite, areawide estimates. Industries and establishments differ in pay level and job staffing, and thus contribute differently to the estimates

for each job. Pay averages may fail to reflect accurately the wage differential among jobs in individual establishments.

Average pay levels for men and women in selected occupations should not be assumed to reflect differences in pay of the sexes within individual establishments. Factors which may contribute to differences include progression within established rate ranges (only the rates paid incumbents are collected) and performance of specific duties within the general survey job descriptions. Job descriptions used to classify employees in these surveys usually are more generalized than those used in individual establishments and allow for minor differences among establishments in specific duties performed.

Occupational employment estimates represent the total in all establishments within the scope of the study and not the number actually surveyed. Because occupational structures among establishments differ, estimates of occupational employment obtained from the sample of establishments studied serve only to indicate the relative importance of the jobs studied. These differences in occupational structure do not affect materially the accuracy of the earnings data.

Wage trends for selected occupational groups

Indexes in table A-7 measure wages at a given time, expressed as a percent of wages during the base period. Subtracting 100 from the index yields the percent change in wages from the base period to the date of the index. The percent increases in table A-7 relate to wage changes between the indicated dates. Annual rates of increase, where shown, reflect the amount of increase for 12 months when the time span between surveys was other than 12 months. These computations are based on the assumption that wages increased at a constant rate between surveys.

The indexes and percent increases are based on changes in average hourly earnings of men and women in establishments reporting the trend jobs in both the current and previous year (matched establishments). The data are adjusted to remove the effects on average earnings of employment shifts among establishments and turnover of establishments included in survey samples. The percent increases, however, are still affected by factors other than wage increases. Turnover may affect an establishment average for an occupation when workers are paid under plans providing a range of wage rates for individual jobs. In periods of increased hiring, for example, new employees may enter at the bottom of the range, depressing the average without a change in wage rates.

Occupations used to compute wage trends are:

Office clerical

Secretaries
Stenographers, I and II
Typists, I and II
File clerks, I, II, and III
Messengers

Switchboard operators
Order clerks, I and II
Accounting clerks, I, II, III, and IV
Payroll clerks
Key entry operators, I and II

Electronic data processing

Computer systems analysts, I, II, and III

Computer programmers, I, II, and III
Computer operators, I, II, and III

Industrial nurses

Registered industrial nurses

Skilled maintenance

Carpenters
Electricians
Painters
Machinists

Mechanics (machinery)
Mechanics (motor vehicle)
Pipefitters
Tool and die makers

Unskilled plant

Janitors, porters, and cleaners

Material handling laborers

Percent changes for individual areas in the program are computed as follows:

1. Average earnings are computed for each occupation for the 2 years being compared. The averages are derived from earnings in those establishments which are in the survey both years; it is assumed that employment remains unchanged.
2. Each occupation is assigned a weight based on its proportionate employment in the occupational group.
3. These weights are used to compute group averages. Each occupation's average earnings (computed in step 1) are multiplied by its weight. The products are totaled to obtain a group average.
4. The ratio of group averages for 2 consecutive years is computed by dividing the average for the current year by the average for the earlier year. The result—expressed as a percent—less 100 is the percent change.

The index is computed by adding 100 to the most recent percent increase, multiplying the total by the previous year's index number, and dividing the product by 100 to obtain the current index value.

For a more detailed description of the method used to compute these wage trends, see "Improving Area Wage Survey Indexes," *Monthly Labor Review*, January 1973, pp. 52-57.

Pay relationships in establishments

Tables A-8 through A-11 compare average pay of occupations in individual establishments. These comparisons, expressed as pay relatives (pay for one of the occupations equals 100), yield different results than comparisons of overall survey averages, such as those shown in tables A-1 through A-6. The latter reflect differences in contributions to the survey averages by establishments with disparate pay levels; the pay relative comparisons are not affected by such differences.

Appendix table 1. Establishments and workers within scope of survey and number studied in Dayton, Ohio,¹ December 1981

Industry division ²	Minimum employment in establishments in scope of survey	Number of establishments		Workers in establishments		
		Within scope of survey ³	Studied	Within scope of survey ³		Studied
				Number	Percent	
All divisions.....	-	637	147	142,327	100	83,982
Manufacturing.....	50	259	49	80,831	57	49,467
Nonmanufacturing.....	-	378	98	61,496	43	34,485
Transportation, communication, and other public utilities ⁴	50	33	19	10,002	7	8,470
Wholesale trade ⁵	50	75	12	5,430	4	1,168
Retail trade ⁵	50	157	31	30,680	22	15,739
Finance, insurance, and real estate ⁶	50	36	12	6,482	5	4,464
Services ⁷	50	77	24	8,902	6	3,644

¹ The Dayton, Ohio Standard Metropolitan Statistical Area, as defined by the Office of Management and Budget through February 1974, consists of Greene, Miami, Montgomery, and Preble Counties. The "workers within scope of survey" estimates provide a reasonably accurate description of the size and composition of the labor force included in the survey. Estimates are not intended, however, for comparison with other statistical series to measure employment trends or levels since (1) planning of wage surveys requires establishment data compiled considerably in advance of the payroll period studied, and (2) small establishments are excluded from the scope of the survey.

² The 1972 edition of the *Standard Industrial Classification Manual* was used to classify establishments by industry division. All government operations are excluded from the scope of the survey.

³ Includes all establishments with total employment at or above the minimum limitation. All outlets (within the area) of nonmanufacturing companies are considered as one establishment when located within the same industry division.

⁴ Includes all workers in all establishments with total employment (within the area) at or above the minimum limitation.

⁵ Abbreviated to "transportation and utilities" in the A-series tables. Formerly referred to as "public utilities". Taxicabs and services incidental to water transportation are excluded. Dayton's transit system is municipally owned and excluded by definition from the scope of the survey.

⁶ Separate data for this division are not presented in the A-series tables, but the division is represented in the "all industries" and "nonmanufacturing" estimates.

⁷ Hotels and motels; laundries and other personal services; business services; automobile repair, rental, and parking; motion pictures; nonprofit membership organizations (excluding religious and charitable organizations); and engineering and architectural services.

The methods of computing and presenting pay relatives have changed since the last survey in this area. The following procedures are now used to compute relatives in tables A-8 through A-11:

1. Establishments employing workers in both of the paired occupations were identified.
2. Pay levels (averages) for the two occupations were weighted by the combined employment of both jobs to reflect each establishment's contribution to the totals used in this comparison.
3. The weighted pay levels of the two jobs were summed separately; each total was divided by the other and the quotients multiplied by 100 to produce the two pay relatives shown for each job pairing.

Establishment practices and supplementary wage provisions

Tabulations on selected establishment practices and supplementary wage provisions (B-series tables) are not presented in this bulletin. Information for these tabulations is collected at 3-year intervals. These tabulations on minimum entrance salaries for inexperienced office workers; shift differentials; scheduled weekly hours and days; paid holidays; paid vacations; and health, insurance, and pension plans are presented (in the B-series tables) in previous bulletins for this area.

¹ Includes 70 areas surveyed under the Bureau's regular program plus Poughkeepsie-Kingston-Newburgh, N.Y., which is surveyed under contract. In addition, the Bureau conducts more limited area studies in approximately 100 areas at the request of the Employment Standards Administration of the U.S. Department of Labor.

Appendix B. Occupational Descriptions

The primary purpose of preparing job descriptions for the Bureau's wage surveys is to assist its field representatives in classifying into appropriate occupations workers who are employed under a variety of payroll titles and different work arrangements from establishment to establishment and from area to area. This permits grouping occupational wage rates representing comparable job content. Because of this emphasis on interestablishment and interarea comparability of occupational content, the Bureau's job descriptions may differ significantly from those in use in individual establishments or those prepared for other purposes. In applying these job descriptions, the Bureau's field representatives are instructed to exclude working supervisors; apprentices; and part-time, temporary, and probationary workers. Handicapped workers whose earnings are reduced because of their handicap are also excluded. Learners, beginners, and trainees, unless specifically included in the job description, are excluded.

Office

SECRETARY

Assigned as a personal secretary, normally to one individual. Maintains a close and highly responsive relationship to the day-to-day activities of the supervisor. Works fairly independently receiving a minimum of detailed supervision and guidance. Performs varied clerical and secretarial duties requiring a knowledge of office routine and understanding of the organization, programs, and procedures related to the work of the supervisor.

Exclusions. Not all positions that are titled "secretary" possess the above characteristics. Examples of positions which are excluded from the definition are as follows:

- a. Positions which do not meet the "personal" secretary concept described above;
- b. Stenographers not fully trained in secretarial-type duties;
- c. Stenographers serving as office assistants to a group of professional, technical, or managerial persons;

- d. Assistant-type positions which entail more difficult or more responsible technical, administrative, or supervisory duties which are not typical of secretarial work, e.g., Administrative Assistant, or Executive Assistant;
- e. Positions which do not fit any of the situations listed in the sections below titled "Level of Supervisor," e.g., secretary to the president of a company that employs, in all, over 5,000 persons;
- f. Trainees.

Classification by level. Secretary jobs which meet the required characteristics are matched at one of five levels according to (a) the level of the secretary's supervisor within the company's organizational structure and, (b) the level of the secretary's responsibility. The tabulation following the explanations of these two factors indicates the level of the secretary for each combination of the factors.

Level of Secretary's Supervisor (LS)

LS-1

- a. Secretary to the supervisor or head of a small organizational unit (e.g., fewer than about 25 or 30 persons); or
- b. Secretary to a nonsupervisory staff specialist, professional employee, administrative officer or assistant, skilled technician or expert. (NOTE: Many companies assign stenographers, rather than secretaries as described above, to this level of supervisory or nonsupervisory worker.)

LS-2

- a. Secretary to an executive or managerial person whose responsibility is not equivalent to one of the specific level situations in the definition for LS-3, but whose organizational unit normally numbers at least several dozen employees and is usually divided into organizational segments which are often, in turn, further subdivided. In some companies, this level includes a wide range of organizational echelons; in others, only one or two; or
- b. Secretary to the head of an individual plant, factory, etc., (or other equivalent level of official) that employs, in all, fewer than 5,000 persons.

LS-3

- a. Secretary to the chairman of the board or president of a company that employs, in all, fewer than 100 persons; or
- b. Secretary to a corporate officer (other than chairman of the board or president) of a company that employs, in all, over 100 but fewer than 5,000 persons; or
- c. Secretary to the head (immediately below the officer level) over either a major corporatewide functional activity (e.g., marketing, research, operations, industrial relations, etc.) or a major geographic or organizational segment (e.g., a regional headquarters; a major division) of a company that employs, in all, over 5,000 but fewer than 25,000 employees; or
- d. Secretary to the head of an individual plant, factory, etc., (or other equivalent level of official) that employs, in all, over 5,000 persons; or
- e. Secretary to the head of a large and important organizational segment (e.g., a middle management supervisor of an organizational segment often involving as many as several hundred persons) of a company that employs, in all, over 25,000 persons.

LS-4

- a. Secretary to the chairman of the board or president of a company that employs, in all, over 100 but fewer than 5,000 persons; or
- b. Secretary to a corporate officer (other than the chairman of the board or president) of a company that employs, in all, over 5,000 but fewer than 25,000 persons; or
- c. Secretary to the head, immediately below the corporate officer level, of a major segment or subsidiary of a company that employs, in all, over 25,000 persons.

NOTE: The term "corporate officer" used in the above LS definition refers to those officials who have a significant corporatewide policy-making role with regard to major company activities. The title "vice president," though normally indicative of this role, does not in all cases identify such positions. Vice presidents whose primary responsibility is to act personally on individual cases or transactions (e.g., approve or deny individual loan or credit actions; administer individual trust accounts; directly supervise a clerical staff) are not considered to be "corporate officers" for purposes of applying the definition.

Level of Secretary's Responsibility(LR)

This factor evaluates the nature of the work relationship between the secretary and the supervisor, and the extent to which the secretary is expected to exercise initiative and judgment. Secretaries should be matched at LR-1 or LR-2 described below according to their level of responsibility.

LR-1

Performs varied secretarial duties including or comparable to most of the following:

- a. Answers telephones, greets personal callers, and opens incoming mail.
- b. Answers telephone requests which have standard answers. May reply to requests by sending a form letter.
- c. Reviews correspondence, memoranda, and reports prepared by others for the supervisor's signature to ensure procedural and typographical accuracy.
- d. Maintains supervisor's calendar and makes appointments as instructed.
- e. Types, takes and transcribes dictation, and files.

LR-2

Performs duties described under LR-1 and, in addition performs tasks requiring greater judgment, initiative, and knowledge of office functions including or comparable to most of the following:

- a. Screens telephone and personal callers, determining which can be handled by the supervisor's subordinates or other offices.
- b. Answers requests which require a detailed knowledge of office procedures or collection of information from files or other offices. May sign routine correspondence in own or supervisor's name.
- c. Compiles or assists in compiling periodic reports on the basis of general instructions.
- d. Schedules tentative appointments without prior clearance. Assembles necessary background material for scheduled meetings. Makes arrangements for meetings and conferences.
- e. Explains supervisor's requirements to other employees in supervisor's unit. (Also types, takes dictation, and files.)

The following tabulation shows the level of the secretary for each LS and LR combination:

	LR-1	LR-2
LS-1.....	I	II
LS-2.....	II	III
LS-3.....	III	IV
LS-4.....	IV	V

STENOGRAPHER

Primary duty is to take dictation using shorthand, and to transcribe the dictation. May also type from written copy. May operate from a stenographic pool. May occasionally transcribe from voice recordings (if primary duty is transcribing from recordings, see Transcribing-Machine Typist). *NOTE:* This job is distinguished from that of a secretary in that a secretary normally works in a confidential relationship with only one manager or executive and performs more responsible and discretionary tasks as described in the secretary job definition.

Stenographer I

Dictation involves a normal routine vocabulary. May maintain files, keep simple records, or perform other relatively routine clerical tasks.

Stenographer II

Dictation involves a varied technical or specialized vocabulary such as in legal briefs or reports on scientific research. May also set up and maintain files, keep records, etc.,
OR

Performs stenographic duties requiring significantly greater independence and responsibility than Stenographer I, as evidenced by the following: Work requires a high degree of stenographic speed and accuracy; a thorough working knowledge of general business and office procedure and of the specific business operations, organization, policies, procedures, files, workflow, etc. Uses this knowledge in performing stenographic duties and responsible clerical tasks such as maintaining follow-up files; assembling material for reports, memoranda, and letters; composing simple letters from general instructions; reading and routing incoming mail; and answering routine questions, etc.

TRANSCRIBING-MACHINE TYPIST

Primary duty is to type copy of voice recorded dictation which does *not* involve varied technical or specialized vocabulary such as that used in legal briefs or reports on scientific research. May also type from written copy. May maintain files, keep simple records, or perform other relatively routine clerical tasks. (See Stenographer definition for workers involved with shorthand dictation.)

TYPIST

Uses a typewriter to make copies of various materials or to make out bills after calculations have been made by another person. May include typing of stencils, mats, or similar materials for use in duplicating processes. May do clerical work involving little special training, such as keeping simple records, filing records and reports, or sorting and distributing incoming mail.

Typist I

Performs *one or more of the following:* Copy typing from rough or clear drafts; or routine typing of forms, insurance policies, etc.; or setting up simple standard tabulations; or copying more complex tables already set up and spaced properly.

Typist II

Performs *one or more of the following:* Typing material in final form when it involves combining material from several sources; or responsibility for correct spelling, syllabication, punctuation, etc., of technical or unusual words or foreign language

material; or planning layout and typing of complicated statistical tables to maintain uniformity and balance in spacing. May type routine form letters, varying details to suit circumstances.

FILE CLERK

Files, classifies, and retrieves material in an established filing system. May perform clerical and manual tasks required to maintain files. Positions are classified into levels on the basis of the following definitions:

File Clerk I

Performs routine filing of material that has already been classified or which is easily classified in a simple serial classification system (e.g., alphabetical, chronological, or numerical). As requested, locates readily available material in files and forwards material; and may fill out withdrawal charge. May perform simple clerical and manual tasks required to maintain and service files.

File Clerk II

Sorts, codes, and files unclassified material by simple (subject matter) headings or partly classified material by finer subheadings. Prepares simple related index and cross-reference aids. As requested, locates clearly identified material in files and forwards material. May perform related clerical tasks required to maintain and service files.

File Clerk III

Classifies and indexes file material such as correspondence, reports, technical documents, etc., in an established filing system containing a number of varied subject matter files. May also file this material. May keep records of various types in conjunction with the files. May lead a small group of lower level file clerks.

MESSENGER

Performs various routine duties such as running errands, operating minor office machines such as sealers or mailers, opening and distributing mail, and other minor clerical work. Exclude positions that require operation of a motor vehicle as a significant duty.

SWITCHBOARD OPERATOR

Operates a telephone switchboard or console used with a private branch exchange (PBX) system to relay incoming, outgoing, and intrasystem calls. May provide information to callers, record and transmit messages, keep record of calls placed and toll charges. Besides operating a telephone switchboard or console, *may* also type or perform routine clerical work (typing or routine clerical work may occupy the major portion of the worker's time, and is usually performed while at the switchboard or console). Chief or lead operators in establishments employing more than one operator are excluded. For an operator who also acts as a receptionist, see Switchboard operator-receptionist.

SWITCHBOARD OPERATOR-RECEPTIONIST

At a single-position telephone switchboard or console, acts both as an operator—see Switchboard operator—and as a receptionist. Receptionist's work involves such duties as greeting visitors; determining nature of visitor's business and providing appropriate information; referring visitor to appropriate person in the organization or contacting that person by telephone and arranging an appointment; keeping a log of visitors.

ORDER CLERK

Receives written or verbal customers' purchase orders for material or merchandise from customers or sales people. Work typically involves some combination of the following duties: Quoting prices; determining availability of ordered items and suggesting substitutes when necessary; advising expected delivery date and method of delivery; recording order and customer information on order sheets; checking order sheets for accuracy and adequacy of information recorded; ascertaining credit rating of customer; furnishing customer with acknowledgement of receipt of order; following up to see that order is delivered by the specified date or to let customer know of a delay in delivery; maintaining order file; checking shipping invoice against original order. *Exclude workers paid on a commission basis or whose duties include any of the following:* Receiving orders for services rather than for material or merchandise; providing customers with consultative advice using knowledge gained from engineering or extensive technical training; emphasizing selling skills; handling material or merchandise as an integral part of the job.

Positions are classified into levels according to the following definitions:

Order Clerk I

Handles orders involving items which have readily identified uses and applications. May refer to a catalog, manufacturer's manual, or similar document to insure that proper item is supplied or to verify price of ordered item.

Order Clerk II

Handles orders that involve making judgments such as choosing which specific product or material from the establishment's product lines will satisfy the customer's needs, or determining the price to be quoted when pricing involves more than merely referring to a price list or making some simple mathematical calculations.

ACCOUNTING CLERK

Performs one or more accounting tasks such as posting to registers and ledgers; balancing and reconciling accounts; verifying the internal consistency, completeness, and mathematical accuracy of accounting documents; assigning prescribed accounting distribution codes; examining and verifying the clerical accuracy of various types of reports, lists, calculations, postings, etc.; preparing journal vouchers; or making entries or adjustments to accounts.

Levels I and II require a basic knowledge of routine clerical methods and office practices and procedures as they relate to the clerical processing and recording of transactions and accounting information. Levels III and IV require a knowledge and understanding of the established and standardized bookkeeping and accounting procedures and techniques used in an accounting system, or a segment of an accounting system, where there are few variations in the types of transactions handled. In addition, some jobs at each level may require a basic knowledge and understanding of the terminology, codes, and processes used in an automated accounting system.

Accounting Clerk I

Performs very simple and routine accounting clerical operations, for example, recognizing and comparing easily identified numbers and codes on similar and repetitive accounting documents, verifying mathematical accuracy, and identifying discrepancies and bringing them to the supervisor's attention. Supervisor gives clear

and detailed instructions for specific assignments. Employee refers to supervisor all matters not covered by instructions. Work is closely controlled and reviewed in detail for accuracy, adequacy, and adherence to instructions.

Accounting Clerk II

Performs one or more routine accounting clerical operations, such as: Examining, verifying, and correcting accounting transactions to ensure completeness and accuracy of data and proper identification of accounts, and checking that expenditures will not exceed obligations in specified accounts; totaling, balancing, and reconciling collection vouchers; posting data to transaction sheets where employee identifies proper accounts and items to be posted; and coding documents in accordance with a chart (listing) of accounts. Employee follows specific and detailed accounting procedures. Completed work is reviewed for accuracy and compliance with procedures.

Accounting Clerk III

Uses a knowledge of double entry bookkeeping in performing one or more of the following: Posts actions to journals, identifying subsidiary accounts affected and debit and credit entries to be made and assigning proper codes; reviews computer printouts against manually maintained journals, detecting and correcting erroneous postings, and preparing documents to adjust accounting classifications and other data; or reviews lists of transactions rejected by an automated system, determining reasons for rejections, and preparing necessary correcting material. On routine assignments, employee selects and applies established procedures and techniques. Detailed instructions are provided for difficult or unusual assignments. Completed work and methods used are reviewed for technical accuracy.

Accounting Clerk IV

Maintains journals or subsidiary ledgers of an accounting system and balances and reconciles accounts. Typical duties include one or both of the following: Reviews invoices and statements (verifying information, ensuring sufficient funds have been obligated, and if questionable, resolving with the submitting unit, determining accounts involved, coding transactions, and processing material through data processing for application in the accounting system); and/or analyzes and reconciles computer printouts with operating unit reports (contacting units and researching causes of discrepancies, and taking action to ensure that accounts balance). Employee resolves problems in recurring assignments in accordance with previous training and experience. Supervisor provides suggestions for handling unusual or nonrecurring transactions. Conformance with requirements and technical soundness of completed work are reviewed by the supervisor or are controlled by mechanisms built into the accounting system.

NOTE: Excluded from level IV are positions responsible for maintaining either a general ledger or a general ledger in combination with subsidiary accounts.

PAYROLL CLERK

Performs the clerical tasks necessary to process payrolls and to maintain payroll records. Work involves *most of the following*: Processing workers' time or production records; adjusting workers' records for changes in wage rates, supplementary benefits, or tax deductions; editing payroll listings against source records; tracing and correcting

errors in listings; and assisting in preparation of periodic summary payroll reports. In a nonautomated payroll system, computes wages. Work may require a practical knowledge of governmental regulations, company payroll policy, or the computer system for processing payrolls.

KEY ENTRY OPERATOR

Operates keyboard-controlled data entry device such as keypunch machine or key-operated magnetic tape or disk encoder to transcribe data into a form suitable for computer processing. Work requires skill in operating an alphanumeric keyboard and an understanding of transcribing procedures and relevant data entry equipment.

Positions are classified into levels on the basis of the following definitions:

Key Entry Operator I

Work is routine and repetitive. Under close supervision or following specific procedures or detailed instructions, works from various standardized source documents which have been coded and require little or no selecting, coding, or interpreting of data to be entered. Refers to supervisor problems arising from erroneous items, codes, or missing information.

Key Entry Operator II

Work requires the application of experience and judgment in selecting procedures to be followed and in searching for, interpreting, selecting, or coding items to be entered from a variety of source documents. On occasion may also perform routine work as described for level I.

NOTE: Excluded are operators above level II using the key entry controls to access, read, and evaluate the substance of specific records to take substantive actions, or to make entries requiring a similar level of knowledge.

Professional and Technical

COMPUTER SYSTEMS ANALYST, BUSINESS

Analyzes business problems to formulate procedures for solving them by use of electronic data processing equipment. Develops a complete description of all specifications needed to enable programmers to prepare required digital computer programs. Work involves *most of the following*: Analyzes subject-matter operations to be automated and identifies conditions and criteria required to achieve satisfactory results; specifies number and types of records, files, and documents to be used; outlines actions to be performed by personnel and computers in sufficient detail for presentation to management and for programming (typically this involves preparation of work and data flow charts); coordinates the development of test problems and participates in trial runs of new and revised systems; and recommends equipment changes to obtain more effective overall operations. (**NOTE:** Workers performing both systems analysis and programming should be classified as systems analysts if this is the skill used to determine their pay.)

Does not include employees primarily responsible for the management or supervision of other electronic data processing employees, or systems analysts primarily concerned with scientific or engineering problems.

For wage study purposes, systems analysts are classified as follows:

Computer Systems Analyst I

Works under immediate supervision, carrying out analyses as assigned, usually of a single activity. Assignments are designed to develop and expand practical experience in the application of procedures and skills required for systems analysis work. For example, may assist a higher level systems analyst by preparing the detailed specifications required by programmers from information developed by the higher level analyst.

Computer Systems Analyst II

Works independently or under only general direction on problems that are relatively uncomplicated to analyze, plan, program, and operate. Problems are of limited complexity because sources of input data are homogeneous and the output data are closely related. (For example, develops systems for maintaining depositor accounts in a bank, maintaining accounts receivable in a retail establishment, or maintaining inventory accounts in a manufacturing or wholesale establishment.) Confers with persons concerned to determine the data processing problems and advises subject-matter personnel on the implications of the data processing systems to be applied. **OR**

Works on a segment of a complex data processing scheme or system, as described for level III. Works independently on routine assignments and receives instruction and guidance on complex assignments. Work is reviewed for accuracy of judgment, compliance with instructions, and to insure proper alignment with the overall system.

Computer Systems Analyst III

Works independently or under only general direction on complex problems involving all phases of systems analysis. Problems are complex because of diverse sources of input data and multiple-use requirements of output data. (For example, develops an integrated production scheduling, inventory control, cost analysis, and sales analysis record in which every item of each type is automatically processed through the full system of records and appropriate follow-up actions are initiated by the computer.) Confers with persons concerned to determine the data processing problems and advises subject-matter personnel on the implications of new or revised systems of data processing operations. Makes recommendations, if needed, for approval of major systems installations or changes and for obtaining equipment.

May provide functional direction to lower level systems analysts who are assigned to assist.

COMPUTER PROGRAMMER, BUSINESS

Converts statements of business problems, typically prepared by a systems analyst, into a sequence of detailed instructions which are required to solve the problems by automatic data processing equipment. Working from charts or diagrams, the programmer develops the precise instructions which, when entered into the computer system in coded language, cause the manipulation of data to achieve desired results. Work involves *most of the following*: Applies knowledge of computer capabilities, mathematics, logic employed by computers, and particular subject matter involved to analyze charts and diagrams of the problem to be programmed; develops sequence of program steps; writes detailed flow charts to show order in which data will be processed; converts these charts to coded instructions for machine to follow; tests and corrects programs; prepares instructions for operating personnel during production run; analyzes, reviews, and alters programs to increase operating efficiency or adapt to new requirements; maintains records of program development and revisions. (**NOTE:**

Workers performing both systems analysis and programming should be classified as systems analysts if this is the skill used to determine their pay.)

Does not include employees primarily responsible for the management or supervision of other electronic data processing employees, or programmers primarily concerned with scientific and/or engineering problems.

For wage study purposes, programmers are classified as follows:

Computer Programmer I

Makes practical applications of programming practices and concepts usually learned in formal training courses. Assignments are designed to develop competence in the application of standard procedures to routine problems. Receives close supervision on new aspects of assignments; and work is reviewed to verify its accuracy and conformance with required procedures.

Computer Programmer II

Works independently or under only general direction on relatively simple programs, or on simple segments of complex programs. Programs (or segments) usually process information to produce data in two or three varied sequences or formats. Reports and listings are produced by refining, adapting, arraying, or making minor additions to or deletions from input data which are readily available. While numerous records may be processed, the data have been refined in prior actions so that the accuracy and sequencing of data can be tested by using a few routine checks. Typically, the program deals with routine recordkeeping operations. *OR*

Works on complex programs (as described for level III) under close direction of a higher level programmer or supervisor. May assist higher level programmer by independently performing less difficult tasks assigned, and performing more difficult tasks under fairly close direction.

May guide or instruct lower level programmers.

Computer Programmer III

Works independently or under only general direction on complex problems which require competence in all phases of programming concepts and practices. Working from diagrams and charts which identify the nature of desired results, major processing steps to be accomplished, and the relationships between various steps of the problem solving routine; plans the full range of programming actions needed to efficiently utilize the computer system in achieving desired end products.

At this level, programming is difficult because computer equipment must be organized to produce several interrelated but diverse products from numerous and diverse data elements. A wide variety and extensive number of internal processing actions must occur. This requires such actions as development of common operations which can be reused, establishment of linkage points between operations, adjustments to data when program requirements exceed computer storage capacity, and substantial manipulation and resequencing of data elements to form a highly integrated program.

May provide functional direction to lower level programmers who are assigned to assist.

COMPUTER OPERATOR

In accordance with operating instructions, monitors and operates the control console of a digital computer to process data. Executes runs by either serial processing

(processes one program at a time) or multiprocessing (processes two or more programs simultaneously). The following duties characterize the work of a computer operator:

- a. Studies operating instructions to determine equipment setup needed.
- b. Loads equipment with required items (tapes, cards, disks, paper, etc.).
- c. Switches necessary auxiliary equipment into system.
- d. Starts and operates computer.
- e. Responds to operating and computer output instructions.
- f. Reviews error messages and makes corrections during operation or refers problems.
- g. Maintains operating record.

May test-run new or modified programs. May assist in modifying systems or programs. The scope of this definition includes trainees working to become fully qualified computer operators, fully qualified computer operators, and lead operators providing technical assistance to lower level operators. It excludes workers who monitor and operate remote terminals.

For wage study purposes, computer operators are classified as follows:

Computer Operator I

Work assignments are limited to established production runs (i.e., programs which present few operating problems). Assignments may consist primarily of on-the-job training (sometimes augmented by classroom instruction). When learning to run programs, the supervisor or a higher level operator provides detailed written or oral guidance to the operator before and during the run. After the operator has gained experience with a program, however, the operator works fairly independently in applying standard operating or corrective procedures in responding to computer output instructions or error conditions, but refers problems to a higher level operator or the supervisor when standard procedures fail.

Computer Operator II

In addition to established production runs, work assignments include runs involving new programs, applications, and procedures (i.e., situations which require the operator to adapt to a variety of problems). At this level, the operator has the training and experience to work fairly independently in carrying out most assignments. Assignments may require the operator to select from a variety of standard setup and operating procedures. In responding to computer output instructions or error conditions, applies standard operating or corrective procedures, but may deviate from standard procedures when standard procedures fail if deviation does not materially alter the computer unit's production plans. Refers the problem or aborts the program when procedures applied do not provide a solution. May guide lower level operators.

Computer Operator III

In addition to work assignments described for Computer operator II (see above) the work of Computer operator III involves at least one of the following:

- a. Deviates from standard procedures to avoid the loss of information or to conserve computer time even though the procedures applied materially alter the computer unit's production plans.
- b. Tests new programs, applications, and procedures.

- c. Advises programmers and subject-matter experts on setup techniques.
- d. Assists in (1) maintaining, modifying, and developing operating systems or programs; (2) developing operating instructions and techniques to cover problem situations; and/or (3) switching to emergency backup procedures (such assistance requires a working knowledge of program language, computer features, and software systems).

An operator at this level typically guides lower level operators.

PERIPHERAL EQUIPMENT OPERATOR

Operates peripheral equipment which directly supports digital computer operations. Such equipment is uniquely and specifically designed for computer applications, but need not be physically or electronically connected to a computer. Printers, plotters, card read/punches, tape readers, tape units or drives, disk units or drives, and data display units are examples of such equipment.

The following duties characterize the work of a peripheral equipment operator:

- a. Loading printers and plotters with correct paper; adjusting controls for forms, thickness, tension, printing density, and location; and unloading hard copy.
- b. Labeling tape reels, disks, or card decks.
- c. Checking labels and mounting and dismounting designated tape reels or disks on specified units or drives.
- d. Setting controls which regulate operation of the equipment.
- e. Observing panel lights for warnings and error indications and taking appropriate action.
- f. Examining tapes, cards, or other material for creases, tears, or other defects which could cause processing problems.

This classification excludes workers (1) who monitor and operate a control console (see Computer operator) or a remote terminal, or (2) whose duties are limited to operating decollaters, bursters, separators, or similar equipment.

COMPUTER DATA LIBRARIAN

Maintains library of media (tapes, disks, cards, cassettes) used for automatic data processing applications. The following or similar duties characterize the work of a computer data librarian: Classifying, cataloging, and storing media in accordance with a standardized system; upon proper requests, releasing media for processing; maintaining records of releases and returns; inspecting returned media for damage or excessive wear to determine whether or not they need replacing. May perform minor repairs to damaged tapes.

DRAFTER

Performs drafting work requiring knowledge and skill in drafting methods, procedures, and techniques. Prepares drawings of structures, mechanical and electrical equipment, piping and duct systems and other similar equipment, systems, and assemblies. Uses recognized systems of symbols, legends, shadings, and lines having specific meanings in drawings. Drawings are used to communicate engineering ideas, designs, and information in support of engineering functions.

The following are excluded when they constitute the primary purpose of the job:

- a. Design work requiring the technical knowledge, skill, and ability to conceive or originate designs;
- b. Illustrating work requiring artistic ability;
- c. Work involving the preparation of charts, diagrams, room arrangements, floor plans, etc.;
- d. Cartographic work involving the preparation of maps or plats and related materials, and drawings of geological structures; and
- e. Supervisory work involving the management of a drafting program or the supervision of drafters.

Positions are classified into levels on the basis of the following definitions.

Drafter I

Working under close supervision, traces or copies finished drawings, making clearly indicated revisions. Uses appropriate templates to draw curved lines. Assignments are designed to develop increasing skill in various drafting techniques. Work is spot-checked during progress and reviewed upon completion.

NOTE: Exclude drafters performing elementary tasks while receiving training in the most basic drafting methods.

Drafter II

Prepares drawings of simple, easily visualized parts or equipment from sketches or marked-up prints. Selects appropriate templates and other equipment needed to complete assignments. Drawings fit familiar patterns and present few technical problems. Supervisor provides detailed instructions on new assignments, gives guidance when questions arise, and reviews completed work for accuracy.

Drafter III

Prepares various drawings of parts and assemblies, including sectional profiles, irregular or reverse curves, hidden lines, and small or intricate details. Work requires use of most of the conventional drafting techniques and a working knowledge of the terms and procedures of the industry. Familiar or recurring work is assigned in general terms; unfamiliar assignments include information on methods, procedures, sources of information, and precedents to be followed. Simple revisions to existing drawings may be assigned with a verbal explanation of the desired results; more complex revisions are produced from sketches which clearly depict the desired product.

Drafter IV

Prepares complete sets of complex drawings which include multiple views, detail drawings, and assembly drawings. Drawings include complex design features that require considerable drafting skill to visualize and portray. Assignments regularly require the use of mathematical formulas to compute weights, load capacities, dimensions, quantities of materials, etc. Working from sketches and verbal information supplied by an engineer or designer, determines the most appropriate views, detail drawings, and supplementary information needed to complete assignments. Selects required information from precedents, manufacturers' catalogs, and technical guides. Independently resolves most of the problems encountered. Supervisor or designer may suggest methods of approach or provide advice on unusually difficult problems.

NOTE: Exclude drafters performing work of similar difficulty to that described at this level but who provide support for a variety of organizations which have widely differing functions or requirements.

Drafter V

Works closely with design originators, preparing drawings of unusual, complex or original designs which require a high degree of precision. Performs unusually difficult assignments requiring considerable initiative, resourcefulness, and drafting expertise. Assures that anticipated problems in manufacture, assembly, installation, and operation are resolved by the drawings produced. Exercises independent judgment in selecting and interpreting data based on a knowledge of the design intent. Although working primarily as a drafter, may occasionally perform engineering design work in interpreting general designs prepared by others or in completing missing design details. May provide advice and guidance to lower level drafters or serve as coordinator and planner for large and complex drafting projects.

ELECTRONICS TECHNICIAN

Works on various types of electronic equipment and related devices by performing one or a combination of the following: Installing, maintaining, repairing, overhauling, troubleshooting, modifying, constructing, and testing. Work requires practical application of technical knowledge of electronics principles, ability to determine malfunctions, and skill to put equipment in required operating condition.

The equipment—consisting of either many different kinds of circuits or multiple repetition of the same kind of circuit—includes, but is not limited to, the following: (a) electronic transmitting and receiving equipment (e.g., radar, radio, television, telephone, sonar, navigational aids), (b) digital and analog computers, and (c) industrial and medical measuring and controlling equipment.

This classification excludes repairers of such standard electronic equipment as common office machines and household radio and television sets; production assemblers and testers; workers whose primary duty is servicing electronic test instruments; technicians who have administrative or supervisory responsibility; and drafters, designers, and professional engineers.

Positions are classified into levels on the basis of the following definitions:

Electronics Technician I

Applies working technical knowledge to perform simple or routine tasks in working on electronic equipment, following detailed instructions which cover virtually all procedures. Work typically involves such tasks as: Assisting higher level technicians by performing such activities as replacing components, wiring circuits, and taking test readings; repairing simple electronic equipment; and using tools and common test instruments (e.g., multimeters, audio signal generators, tube testers, oscilloscopes). Is not required to be familiar with the interrelationships of circuits. This knowledge, however, may be acquired through assignments designed to increase competence (including classroom training) so that worker can advance to higher level technician.

Receives technical guidance, as required, from supervisor or higher level technician. Work is typically spot-checked, but is given detailed review when new or advanced assignments are involved.

Electronics Technician II

Applies comprehensive technical knowledge to solve complex problems (i.e., those that typically *can* be solved solely by properly interpreting manufacturers' manuals or similar documents) in working on electronic equipment. Work involves: A familiarity with the interrelationships of circuits; and judgment in determining work sequence and in selecting tools and testing instructions, usually less complex than those used by the level III technician.

Receives technical guidance, as required, from supervisor or higher level technician, and work is reviewed for specific compliance with accepted practices and work assignments. May provide technical guidance to lower level technicians.

Electronics Technician III

Applies advanced technical knowledge to solve unusually complex problems (i.e., those that typically *cannot* be solved solely by reference to manufacturers' manuals or similar documents) in working on electronic equipment. Examples of such problems include location and density of circuitry, electromagnetic radiation, isolating malfunctions, and frequent engineering changes. Work involves: A detailed understanding of the interrelationships of circuits; exercising independent judgment in performing such tasks as making circuit analyses, calculating wave forms, tracing relationships in signal flow; and regularly using complex test instruments (e.g., dual trace oscilloscopes, Q-meters, deviation meters, pulse generators).

Work may be reviewed by supervisor (frequently an engineer or designer) for general compliance with accepted practices. May provide technical guidance to lower level technicians.

REGISTERED INDUSTRIAL NURSE

A registered nurse gives nursing service under general medical direction to ill or injured employees or other persons who become ill or suffer an accident on the premises of a factory or other establishment. Duties involve a *combination of the following*: Giving first aid to the ill or injured; attending to subsequent dressing of employees' injuries; keeping records of patients treated; preparing accident reports for compensation or other purposes; assisting in physical examinations and health evaluations of applicants and employees; and planning and carrying out programs involving health education, accident prevention, evaluation of plant environment, or other activities affecting the health, welfare, and safety of all personnel. Nursing supervisors or head nurses in establishments employing more than one nurse are excluded.

Maintenance, Toolroom, and Powerplant

MAINTENANCE CARPENTER

Performs the carpentry duties necessary to construct and maintain in good repair building woodwork and equipment such as bins, cribs, counters, benches, partitions, doors, floors, stairs, casings, and trim made of wood in an establishment. Work involves *most of the following*: Planning and laying out of work from blueprints, drawings, models, or verbal instructions; using a variety of carpenter's handtools, portable power tools, and standard measuring instruments; making standard shop computations relating to dimensions of work; and selecting materials necessary for the work. In general, the work of the maintenance carpenter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE ELECTRICIAN

Performs a variety of electrical trade functions such as the installation, maintenance, or repair of equipment for the generation, distribution, or utilization of electric energy in an establishment. Work involves *most of the following*: Installing or repairing any of a variety of electrical equipment such as generators, transformers, switchboards, controllers, circuit breakers, motors, heating units, conduit systems, or other transmission equipment; working from blueprints, drawings, layouts, or other specifications; locating and diagnosing trouble in the electrical system or equipment; working standard computations relating to load requirements of wiring or electrical equipment; and using a variety of electrician's handtools and measuring and testing instruments. In general, the work of the maintenance electrician requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE PAINTER

Paints and redecorates walls, woodwork, and fixtures of an establishment. Work involves *the following*: Knowledge of surface peculiarities and types of paint required for different applications; preparing surface for painting by removing old finish or by placing putty or filler in nail holes and interstices; and applying paint with spray gun or brush. May mix colors, oils, white lead, and other paint ingredients to obtain proper color or consistency. In general, the work of the maintenance painter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE MACHINIST

Produces replacement parts and new parts in making repairs of metal parts of mechanical equipment operated in an establishment. Work involves *most of the following*: Interpreting written instructions and specifications; planning and laying out of work; using a variety of machinist's handtools and precision measuring instruments; setting up and operating standard machine tools; shaping of metal parts to close tolerances; making standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining; knowledge of the working properties of the common metals; selecting standard materials, parts, and equipment required for this work; and fitting and assembling parts into mechanical equipment. In general, the machinist's work normally requires a rounded training in machine-shop practice usually acquired through a formal apprenticeship or equivalent training and experience.

MAINTENANCE MECHANIC (MACHINERY)

Repairs machinery or mechanical equipment of an establishment. Work involves *most of the following*: Examining machines and mechanical equipment to diagnose source of trouble; dismantling or partly dismantling machines and performing repairs that mainly involve the use of handtools in scraping and fitting parts; replacing broken or defective parts with items obtained from stock; ordering the production of a replacement part by a machine shop or sending the machine to a machine shop for major repairs; preparing written specifications for major repairs or for the production of parts ordered from machine shops; reassembling machines; and making all necessary adjustments for operation. In general, the work of a machinery maintenance mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. Excluded from this classification are workers whose *primary duties* involve setting up or adjusting machines.

MAINTENANCE MECHANIC (MOTOR VEHICLE)

Repairs automobiles, buses, motortrucks, and tractors of an establishment. Work involves *most of the following*: Examining automotive equipment to diagnose source of trouble; disassembling equipment and performing repairs that involve the use of such handtools as wrenches, gauges, drills, or specialized equipment in disassembling or fitting parts; replacing broken or defective parts from stock; grinding and adjusting valves; reassembling and installing the various assemblies in the vehicle and making necessary adjustments; and aligning wheels, adjusting brakes and lights, or tightening body bolts. In general, the work of the motor vehicle maintenance mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

This classification does not include mechanics who repair customers' vehicles in automobile repair shops.

MAINTENANCE PIPEFITTER

Installs or repairs water, steam, gas, or other types of pipe and pipefittings in an establishment. Work involves *most of the following*: Laying out work and measuring to locate position of pipe from drawings or other written specifications; cutting various sizes of pipe to correct lengths with chisel and hammer or oxyacetylene torch or pipe-cutting machines; threading pipe with stocks and dies; bending pipe by hand-driven or power-driven machines; assembling pipe with couplings and fastening pipe to hangers; making standard shop computations relating to pressures, flow, and size of pipe required; and making standard tests to determine whether finished pipes meet specifications. In general, the work of the maintenance pipefitter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. *Workers primarily engaged in installing and repairing building sanitation or heating systems are excluded.*

MAINTENANCE SHEET-METAL WORKER

Fabricates, installs, and maintains in good repair the sheet-metal equipment and fixtures (such as machine guards, grease pans, shelves, lockers, tanks, ventilators, chutes, ducts, metal roofing) of an establishment. Work involves *most of the following*: Planning and laying out all types of sheet-metal maintenance work from blueprints, models, or other specifications; setting up and operating all available types of sheet-metal working machines; using a variety of handtools in cutting, bending, forming, shaping, fitting, and assembling; and installing sheet-metal articles as required. In general, the work of the maintenance sheet-metal worker requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

MILLWRIGHT

Installs new machines or heavy equipment, and dismantles and installs machines or heavy equipment when changes in the plant layout are required. Work involves *most of the following*: Planning and laying out work; interpreting blueprints or other specifications; using a variety of handtools and rigging; making standard shop computations relating to stresses, strength of materials, and centers of gravity; aligning and balancing equipment; selecting standard tools, equipment, and parts to be used; and installing and maintaining in good order power transmission equipment such as drives and speed reducers. In general, the millwright's work normally requires a rounded training and

JANITOR, PORTER, OR CLEANER

Cleans and keeps in an orderly condition factory working areas and washrooms, or premises of an office, apartment house, or commercial or other establishment. Duties involve a combination of the following: Sweeping, mopping or scrubbing, and polishing

floors; removing chips, trash, and other refuse; dusting equipment, furniture, or fixtures; polishing metal fixtures or trimmings; providing supplies and minor maintenance services; and cleaning lavatories, showers, and restrooms. *Workers who specialize in window washing are excluded.*

Appendix C. Survey Summaries

Job Conversion Table

Beginning in 1981, multilevel jobs are identified by numeric instead of alphabetic designations. A conversion table for the affected occupations follows:

Occupation	Numeric designation (currently used)	Alphabetic designation (previously used)
Secretary.....	I	E
	II	D
	III	C
	IV	B
	V	A
Stenographer.....	I	General
	II	Senior
Typist.....	I	B
	II	A
File clerk.....	I	C
	II	B
	III	A
Order clerk.....	I	B
	II	A
Accounting clerk.....	I	D
	II	C
	III	B
	IV	A
Key entry operator.....	I	B
	II	A

Occupation	Numeric designation (currently used)	Alphabetic designation (previously used)
Computer systems analyst (business).....	I	C
	II	B
	III	A
Computer programmer (business).....	I	C
	II	B
	III	A
Computer operator.....	I	C
	II	B
	III	A
Drafter.....	I	E
	II	D
	III	C
	IV	B
	V	A
Electronics technician.....	I	C
	II	B
	III	A
Guard.....	I	B
	II	A

Area Wage Survey Summaries

The following areas are surveyed periodically for use in administering the Service Contract Act of 1965. Survey results are published in summaries which are available, at no cost, while supplies last from any of the BLS regional offices shown on the back cover.

Alaska (statewide)
Albany, Ga.
Albuquerque, N. Mex.
Alexandria-Leesville, La.
Alpena-Standish-Tawas City, Mich.
Ann Arbor, Mich.
Antelope Valley, Calif.
Asheville, N.C.
Atlantic City, N.J.
Augusta, Ga.-S.C.
Austin, Tex.
Bakersfield, Calif.
Baton Rouge, La.
Battle Creek, Mich.
Beaumont-Port Arthur-Orange and Lake Charles, Tex.-La.
Biloxi-Gulfport and Pascagoula-Moss Point, Miss.
Binghamton, N.Y.
Birmingham, Ala.
Bloomington-Vincennes, Ind.
Bremerton-Shelton, Wash.
Brunswick, Ga.
Cedar Rapids, Iowa
Champaign-Urbana-Rantoul, Ill.
Charleston-North Charleston-Walterboro, S.C.
Charlotte-Gastonia, N.C.
Cheyenne, Wyo.
Clarksville-Hopkinsville, Tenn.-Ky.
Colorado Springs, Colo.
Columbia-Sumter, S.C.

Columbus, Ga.-Ala.
Columbus, Miss.
Connecticut (statewide)
Decatur, Ill.
Des Moines, Iowa
Dothan, Ala.
Duluth-Superior, Minn.-Wis.
El Paso-Alamogordo-Las Cruces, Tex.-N. Mex.
Eugene-Springfield-Medford, Oreg.
Fayetteville, N.C.
Fort Lauderdale-Hollywood and West Palm Beach-Boca Raton, Fla.
Fort Smith, Ark.-Okla.
Fort Wayne, Ind.
Frederick-Hagerstown-Chambersburg, Md.-Pa.
Gadsden and Anniston, Ala.
Goldsboro, N.C.
Grand Island-Hastings, Nebr.
Guam, Territory of
Harrisburg-Lebanon, Pa.
Knoxville, Tenn.
La Crosse-Sparta, Wis.
Laredo, Tex.
Las Vegas-Tonopah, Nev.
Lexington-Fayette, Ky.
Lima, Ohio
Little Rock-North Little Rock, Ark.
Logansport-Peru, Ind.
Lorain-Elyria, Ohio
Lower Eastern Shore, Md.-Va.-Del.
Macon, Ga.
Madison, Wis.
Maine (statewide)
Mansfield, Ohio
McAllen-Pharr-Edinburg and Brownsville-Harlingen-San Benito, Tex.
Meridian, Miss.

Middlesex, Monmouth, and Ocean Counties, N.J.
Mobile-Pensacola-Panama City, Ala.-Fla.
Montana (statewide)
Montgomery, Ala.
Nashville-Davidson, Tenn.
New Bern-Jacksonville, N.C.
New Hampshire (statewide)
North Dakota (statewide)
Northern New York
Northwest Texas
Orlando, Fla.
Oxnard-Simi Valley-Ventura, Calif.
Peoria, Ill.
Phoenix, Ariz.
Pine Bluff, Ark.
Portsmouth-Chillicothe-Gallipolis, Ohio
Pueblo, Colo.
Puerto Rico
Raleigh-Durham, N.C.
Reno, Nev.
Riverside-San Bernardino-Ontario, Calif.
Salina, Kans.
Salinas-Seaside-Monterey, Calif.
Sandusky, Ohio
Santa Barbara-Santa Maria-Lompoc, Calif.
Savannah, Ga.
Selma, Ala.
Sherman-Denison, Tex.
Shreveport, La.
South Dakota (statewide)
Southeastern Massachusetts
Southern Idaho
Southwest Virginia
Spokane, Wash.
Springfield, Ill.

Stockton, Calif.
Tacoma, Wash.
Tampa-St. Petersburg, Fla.
Topeka, Kans.
Tucson-Douglas, Ariz.
Tulsa, Okla.
Upper Peninsula, Mich.
Vallejo-Fairfield-Napa, Calif.
Vermont (statewide)
Virgin Islands of the U.S.
Waco and Killeen-Temple, Tex.
Waterloo-Cedar Falls, Iowa
West Virginia (statewide)
Western and Northern Massachusetts
Wichita Falls-Lawton-Altus, Tex.-Okla.
Wilmington, Del., N.J.-Md.
Yakima-Richland-Kennewick-Pendleton, Wash.-Oreg.

ALSO AVAILABLE—

An annual report on salaries for accountants, auditors, public accountants, chief accountants, attorneys, job analysts, directors of personnel, buyers, chemists, engineers, engineering technicians, drafters, computer operators, and clerical employees is available. Order as BLS Bulletin 2081, *National Survey of Professional, Administrative, Technical and Clerical Pay, March 1980*, \$4.00 a copy, from any of the BLS regional sales offices shown on the back cover, or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Area Wage Surveys

A list of the latest bulletins available is presented below. Bulletins may be purchased from any of the BLS regional offices shown on the back cover, or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C. 20402. Make checks payable to Superintendent of Documents. A directory of occupational wage surveys, covering the years 1974 through 1979, is available on request.

Area	Bulletin number and price*
Albany-Schenectady-Troy, N.Y., Sept. 1981	3010-49 \$2.50
Anaheim-Santa Ana-Garden Grove, Calif., Oct. 1981 ¹	3010-57 \$3.25
Atlanta, Ga., May 1981 ¹	3010-24 \$3.25
Baltimore, Md., Aug. 1981 ¹	3010-39 \$3.00
Billings, Mont., July 1981	3010-25 \$2.25
Boston, Mass., Aug. 1981 ¹	3010-48 \$3.25
Buffalo, N.Y., Oct. 1981 ¹	3010-61 \$3.25
Chattanooga, Tenn.—Ga., Sept. 1981 ¹	3010-42 \$3.25
Chicago, Ill., May 1980	3010-19 \$2.75
Cincinnati, Ohio—Ky.—Ind., July 1981	3010-30 \$2.75
Cleveland, Ohio, Sept. 1981 ¹	3010-44 \$3.25
Columbus, Ohio, Oct. 1981 ¹	3010-54 \$3.25
Corpus Christi, Tex., July 1981	3010-22 \$2.25
Dallas—Fort Worth, Tex., Dec. 1980 ¹	3000-67 \$3.25
Davenport—Rock Island—Moline, Iowa—Ill., Feb. 1981	3010- 7 \$2.25
Dayton, Ohio, Dec. 1981	3010-65 \$2.75
Daytona Beach, Fla., Aug. 1981	3010-38 \$2.25
Denver—Boulder, Colo., Dec. 1980 ¹	3000-68 \$3.25
Detroit, Mich., Apr. 1981	3010-12 \$2.75
Fresno, Calif., June 1981	3010-27 \$2.25
Gainesville, Fla., Sept. 1981	3010-45 \$2.50
Gary—Hammond—East Chicago, Ind., Nov. 1981	3010-59 \$2.50
Green Bay, Wis., July 1981 ¹	3010-26 \$2.75
Greensboro—Winston-Salem—High Point, N.C., Aug. 1981	3010-43 \$2.75
Greenville—Spartanburg, S.C., June 1981	3010-23 \$2.25
Hartford, Conn., Mar. 1981	3010-21 \$2.50
Houston, Tex., May. 1981	3010-14 \$2.75
Huntsville, Ala., Feb. 1981	3010- 5 \$2.25
Indianapolis, Ind., Oct. 1981 ¹	3010-56 \$4.25
Jackson, Miss., Jan. 1981	3010- 4 \$1.75
Jacksonville, Fla., Dec. 1981	3010-63 \$2.50
Kansas City, Mo.—Kans., Sept. 1981	3010-47 \$3.00
Los Angeles—Long Beach, Calif., Oct. 1980	3000-63 \$2.25
Louisville, Ky.—Ind., Nov. 1981	3010-60 \$2.75

Area	Bulletin number and price*
Memphis, Tenn.—Ark.—Miss., Nov. 1981	3010-55 \$2.75
Miami, Fla., Oct. 1981 ¹	3010-53 \$3.25
Milwaukee, Wis., May 1981 ¹	3010-16 \$3.25
Minneapolis—St. Paul, Minn.—Wis., Jan. 1981 ¹	3010- 1 \$3.75
Nassau—Suffolk, N.Y., June 1981 ¹	3010-31 \$3.00
Newark, N.J., Jan. 1981	3010- 3 \$2.25
New Orleans, La., Oct. 1981 ¹	3010-46 \$3.25
New York, N.Y.—N.J., May 1981 ¹	3010-41 \$3.25
Norfolk—Virginia Beach—Portsmouth, Va.—N.C., May 1981	3010-17 \$2.25
Northeast Pennsylvania, Aug. 1981	3010-40 \$2.25
Oklahoma City, Okla., Aug. 1981	3010-37 \$2.25
Omaha, Nebr.—Iowa, Oct. 1981	3010-51 \$2.50
Paterson—Clifton—Passaic, N.J., June 1981	3010-35 \$2.25
Philadelphia, Pa.—N.J., Nov. 1981	3010-52 \$3.00
Pittsburgh, Pa., Jan. 1981	3010- 2 \$2.25
Portland, Maine, Dec. 1981 ¹	3010-64 \$2.75
Portland, Oreg.—Wash., June 1981	3010-29 \$2.75
Poughkeepsie, N.Y., June 1981	3010-28 \$2.25
Poughkeepsie—Kingston—Newburgh, N.Y., June 1981	3010-32 \$2.25
Providence—Warwick—Pawtucket, R.I.—Mass., June 1981	3010-36 \$2.50
Richmond, Va., June 1981	3010-18 \$2.50
St. Louis, Mo.—Ill., Mar. 1981	3010- 8 \$2.75
Sacramento, Calif., Dec. 1980 ¹	3000-70 \$2.25
Saginaw, Mich., Nov. 1981	3010-58 \$2.50
Salt Lake City—Ogden, Utah, Nov. 1981 ¹	3010-62 \$3.00
San Antonio, Tex., May 1981	3010-15 \$2.25
San Diego, Calif., Nov. 1980 ¹	3000-71 \$2.25
San Francisco—Oakland, Calif., Mar. 1981 ¹	3010-13 \$3.00
San Jose, Calif., Mar. 1981 ¹	3010-10 \$3.00
Seattle—Everett, Wash., Dec. 1980	3000-69 \$1.75
South Bend, Ind., Aug. 1981	3010-33 \$2.25
Toledo, Ohio—Mich., June 1981 ¹	3010-20 \$2.75
Trenton, N.J., Sept. 1981 ¹	3010-50 \$3.00
Washington, D.C.—Md.—Va., Mar. 1981 ¹	3010- 6 \$3.00
Wichita, Kans., Apr. 1981	3010-11 \$2.25
Worcester, Mass., Apr. 1981	3010-34 \$2.25
York, Pa., Feb. 1981 ¹	3010- 9 \$2.75

* Prices are determined by the Government Printing Office and are subject to change.

¹ Data on establishment practices and supplementary wage provisions are also presented.